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ENVIRONMENTAL

Subject:

**Ringwood Mines/Landfill Site
Request for Completion of Excavation Activities within SR-13**

Date:
September 19, 2012

Dear Mr. Gowers:

ARCADIS U.S., Inc. (ARCADIS), on behalf of the Ford Motor Company (Ford), is submitting this technical memorandum on the surficial paint sludge removal activities in SR-13 at the Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Background

Surficial paint sludge was observed to the northwest of and adjacent to the Peters Mine Pit (PMP) Area and bedrock monitoring well RW-7, within the northwestern portion of the Ringwood Site. This area was designated as SR-13, and removal activities were conducted from approximately April 6, 2011 through March 30, 2012. Approximately 1,100 tons of paint sludge and 2,250 tons of impacted soil were removed from the area and disposed off-site at the USEPA approved IESI landfill in Bethlehem, Pennsylvania and the USEPA approved Clean Earth Facility, Kearny, New Jersey.

Confirmatory Sampling

Side wall post-excavation soil samples were collected for Target Compound List (TCL) volatile organic compounds (VOCs), (Target Compound List (TCL) semi-VOCs (SVOCs), Target Analyte List (TAL) Metals, cyanide, pesticides/herbicides and polychlorinated biphenyls (PCBs) at a frequency of approximately one (1) sample for every 30 linear feet of excavation side wall. Post-excavation bottom samples were collected for the same parameters at a frequency of approximately one (1) sample for every 900 square feet of excavation bottom area. Groundwater was encountered in the excavation, but was pumped out to allow for collection of post-excavation

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bottom samples. Post-excavation soil sample locations were biased to locations and intervals expected to have the highest potential for impact based on field observations. A total of thirty-four (34) side wall and fifteen (15) bottom samples were collected for laboratory analyses. Post-excavation sample analytical results are summarized in Tables 1, 2 and 3 post-excavation sample locations are shown on Figures 2, 3 and 4, cross sections of the excavated area are shown on Figure 5. The locations of confirmatory test pits are shown on Figure 6.

Note that the first round of excavation activities was conducted under the scope of work outlined within the revised proposal for targeted removal activities at the PMP and before this area had been identified as SR-13.

The first round of excavation activities (April 2011) resulted in an excavation extending to an average depth of three feet below ground surface, with the base of the excavation consisting of a dark silty sand. Continuous screening of soils was conducted with a photoionization detector (PID) to assist in removing any soils where elevated concentrations of VOCs were identified during field screening. Results of these excavation activities are provided in Table 1, shown on Figure 2, and outlined below.

Volatile Organic Compounds

Tetrachloroethene was present at a concentration greater than its NJDEP Default Impact to Groundwater Soil Screening Level (IGWSSL) in sample PE-1SW but below the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS).

Semi-Volatile Organic Compounds, Cyanide, Pesticides/Herbicides, PCBs

No semi-volatile organic compounds were detected in any of the post-excavation samples collected during the April 2011 excavation activities.

No cyanide, pesticides/herbicides or PCBs were detected in any of the post-excavation samples collected within SR-13.

Metals

Of the TAL Metals, aluminum and manganese were reported in all of the post-excavation soil samples at concentrations greater than their respective IGWSSL; however, constituent concentrations did not exceed their respective RDCSRS in any

of the post-excavation samples. Beryllium was detected in samples PE-1B-3.0-3.5, PE-4SW-2.5-3.0, PE-5SW-2.5-3.0, PE-6SW-2.5-3.0 at concentrations greater than its IGWSSL; however, concentrations in these samples did not exceed the RDCSRS at any location. Mercury was also detected in soil sample PE-1SW-2.5-3.0 at a concentration greater than its IGWSSL; however, the concentration in this sample did not exceed the RDCSRS.

Subsequent to the excavation of paint sludge and impacted soil at this location, the USEPA requested that the area be identified as a separate paint sludge removal area, and this area was identified as SR-13. Field activities associated with ongoing work in this area resumed on December 12, 2011. Excavation activities conducted during December 2011 resulted in an excavation extending to an average depth ranging from four to six feet below ground surface, with the base of the excavation consisting of a dark, silty sand. Groundwater was encountered in the excavation. Continuous screening of soils was conducted with a PID to assist in removing any soils where elevated concentrations of VOCs were identified during field screening. Results of these excavation activities are provided in Table 2, shown on Figure 3, and outlined below.

Note that due to exceedances of the soil criteria and the need for re-sampling, post-excavation soil samples PE-1B (12/16/11), PE-2B(12/16/11), PE-1SW(12/16/11), PE-2SW(12/16/11), PE-3SW(12/16/11), PE-4SW(12/16/11), PE-5SW(12/16/11) and PE-6SW(12/16/11) shown in Table 2 and on Figure 3 represent different samples than the samples shown on Figure 2.

Volatile Organic Compounds

The VOCs benzene, cis-1,2-dichloroethene, methylene chloride, tetrachloroethene, toluene, trichloroethene and/or total xylenes were present at concentrations greater than their respective NJDEP IGWSSL in samples PE-1B (4.5-5.0), PE-3SW (6.5-7.0), PE-2B (2.5-3.0), PE-3B (6.0-6.5), PE-4B (9.5-10.0) and PE-11SW (5.5-6.0), however, in all cases, the concentrations did not exceed their respective NJDEP RDCSRS with the exception of tetrachloroethene, which was detected at a concentration of 2.75 mg/kg in sample PE-4B (9.5-10.0).

Semi-volatile Organic Compounds

The SVOCs bis(2-ethylhexyl)phthalate and naphthalene were detected at concentrations greater than their respective IGWSSL and RDCSRS in sample PE-4B (9.5-10.0).

No cyanide, pesticides/herbicides or PCBs were detected in any of the post-excavation soil samples collected in SR-13.

Metals

For the TAL metals, aluminum and manganese were detected in all post-excavation samples at concentrations greater than their respective IGWSSL the concentrations did not exceed their respective RDCSRS in any of the post-excavation soil samples. Beryllium was detected in samples PE-1SW (4.0-4.5), PE-1B (4.5-5.0), PE-2B (2.5-3.0), PE-2SW (4.0-4.5), PE-3SW (6.5-7.0) and PE-11SW (5.5-6.0) at concentrations greater than its respective IGWSSL but below its RDCSRS at all locations.

Based on the results of the Round 2 post-excavation soil sampling, ARCADIS conducted a third round of excavation activities during January 2012 to remove impacted soils identified during the Round 2 activity. The limits of excavation were expanded to extend both vertically and laterally, with the final excavation depth achieved during the third round of excavation ranging between seven and nine feet below ground surface. Again, the base of the excavation consisted of a dark silty sand and groundwater was encountered. Continuous screening of soils was conducted with a PID to assist in delineating the extent of soil for removal based on elevated PID readings identified during field screening.

Results of the second round of excavation activities conducted within SR-13 are shown on Figure 3, attached. As indicated previously, the limits of excavation during the third round of excavation activities were extended both vertically and laterally in comparison to the limits of the Round 2 excavation. The Round 3 post- excavation base soil samples collected in January 2012 were therefore collected from within the same general footprint of the initial excavation; but from a depth approximately two feet deeper than those obtained during the Round 2 activities in December 2011. The side wall samples obtained during Round 3 in January 2012 were, in general obtained from a distance approximately two feet outside the location of the Round 2 side wall samples collected in December 2011.

Volatile Organic Compounds

No VOCs were detected in any of the sidewall or base post-excavation samples collected during the second round of post-excavation sampling within SR-13.

Semi-Volatile Organic Compounds

No SVOCs were detected in any of the sidewall or base post-excavation soil samples collected during the second round of post-excavation sampling within SR-13.

Metals

Similar to the results obtained during the first two rounds of excavation, the TAL metals aluminum and manganese were detected in all post-excavation soil samples at concentrations greater than their respective IGWSSL, but below their respective RDCSRS in all of the post-excavation soil samples. The concentrations of these constituents are consistent with those found in clays and are consistent with the concentrations detected during final post-excavation sampling and background soil sampling conducted across the Site. The data indicate that these constituents are believed to be associated with clay in the native soil and are not associated with paint sludge or other materials removed from this area.

Beryllium was detected in soil samples PE-12SW (9.5-10.0), PE-17SW (6.5-7.0), PE-21SW (8.5-9.0), PE-23SW (8.5-9.0, PE-24SW (8.5-9.0) and PE-27SW (8.5-9.0) at concentrations greater than its respective IGWSSL, but below the RDCSRS of 2 mg/kg at all locations. Beryllium concentrations identified within SR-13 are consistent with concentrations detected during post-excavation and background soil sampling conducted previously at the Ringwood Site. In addition, none of the beryllium concentrations reported within these post-excavation samples exceeded the Overall Highlands Mean Concentration of 0.73 mg/kg reported within rural Highlands area soils during a 2002 study sponsored by the NJDEP¹.

¹ BEM Systems, Inc. Characterization of Ambient Levels of Selected Metals and cPAHs in New Jersey Soils: Year III – Rural Areas of New Jersey Highlands, Valley and Ridge, and Coastal Plain Physiographic Provinces. March 2002.

Vanadium was detected in sidewall post-excavation soil sample PE-14SW (9.5-10.0) at a concentration of 122 mg/kg, which exceeds the RDCSRS of 78 mg/kg for this constituent. There is no NJDEP Default IGWSSL for vanadium. Vanadium is widely present in nature² and is often found in association with iron ore. This is supported by the results of sampling conducted by ARCADIS during June 2007 as part of the USEPA-approved scope of work for the *Investigation of Mine Tailings and Background Soil*,³ which indicated that vanadium was present at elevated concentrations in mine tailings samples, and that the vanadium was most prevalent in magnetically screened samples that also contained elevated iron concentrations indicative of iron ore. The concentrations detected within SR-13 are therefore believed to be derived from the naturally-occurring bedrock, associated with the trace mineral apatite found in the abundant magnetite ore at the Site. However, ARCADIS conducted additional soil removal from the sidewall around post-excavation soil sample PE-14SW on March 30, 2012 to remove soil containing the elevated concentration of vanadium.

A final post-excavation sample was collected from the sidewall after the additional soil removal and submitted for laboratory analysis for vanadium. Results of subsequent post-excavation confirm vanadium was present in the soil sample at a concentration of 23 mg/kg which is below the RDCSRS of 78 mg/kg for this constituent thus confirming that the soil excavation effectively addressed the vanadium. The analytical results for this final post-excavation soil sample are provided in Table 3 and on Figure 3.

Conclusions

Based on the results of post-excavation sampling and analyses, constituents in remaining soils do not exceed their respective NJDEP RDCSRS. ARCADIS therefore requests approval to restore this area in compliance with NJDEP mitigation requirements.

Please feel free to contact me if you have any questions or require additional information.

² eHow.com, by Vincent Summers, Contributor. Where Can Vanadium Be Found in Nature? 2012.

³ ARCADIS US, Inc. Draft Report on Investigation of Mine Tailings and Background Soil, Ringwood Mines/Landfill Site, Ringwood, New Jersey. June 2008.

Sincerely,

ARCADIS US, Inc



Erich Zimmerman, PE
Project Manager

Copies:

Brian Bussa – Ford
Tim Green – Ford
Eric Pain – Ringwood State Park
Scott Heck – Ringwood Borough

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential	NJ Default Impact to	PE-1B-3.0-3.5	PE-1SW-2.5-3.0	PE-2B-3.0-3.5	PE-2B-3.0-3.5 DUP	PE-2SW-2.5-3.0	PE-3SW-2.5-3.0	PE-4SW-2.5-3.0	PE-5SW-2.5-3.0	PE-6SW-2.5-3.0	PE-NLP-S(3.5-4.0)SW
Sample Date	Direct Contact Soil	Groundwater Soil Screening	4/7/2011	4/7/2011	4/11/2011	4/11/2011	4/7/2011	4/7/2011	4/7/2011	4/11/2011	4/11/2011	3/14/2011
Validation Status	(NJAC 7: 26D 6/08)	(NJAC 7:26D 12/08)	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final
VOCs												
1,1,1-Trichloroethane	290	0.2	< 0.00014	< 0.00013	< 0.00011	< 0.00012	< 0.00012	< 0.00011	< 0.00011	< 0.00011	< 0.00012	< 0.00013
1,1,2-Tetrachloroethane	1	0.005	< 0.00032	< 0.00029	< 0.00024	< 0.00026	< 0.00027	< 0.00026	< 0.00026	< 0.00025	< 0.00027	< 0.00031
1,1,2-Trichloroethane	2	0.01	< 0.0002	< 0.00018	< 0.00015	< 0.00017	< 0.00017	< 0.00016	< 0.00016	< 0.00015	< 0.00017	< 0.00019
1,1-Dichloroethane	8	0.2	< 0.00015	< 0.00014	< 0.00012	< 0.00012	< 0.00013	< 0.00012	< 0.00012	< 0.00012	< 0.00013	< 0.00014
1,1-Dichloroethene	11	0.005	< 0.00072	< 0.00066	< 0.00055	< 0.0006	< 0.00061	< 0.00059	< 0.00058	< 0.00055	< 0.00062	< 0.00069
1,2,4-Trichlorobenzene	73	0.4	< 0.00037	< 0.00034	< 0.00029	< 0.00031	< 0.00032	< 0.00031	< 0.0003	< 0.00029	< 0.00032	< 0.00036
1,2-Dibromo-3-Chloropropane (DBCP)	0.08	0.005	< 0.00059	< 0.00054	< 0.00045	< 0.00049	< 0.0005	< 0.00048	< 0.00048	< 0.00045	< 0.00051	< 0.00056
1,2-Dibromoethane	0.008	0.005	< 0.00015	< 0.00014	< 0.00011	< 0.00012	< 0.00013	< 0.00012	< 0.00012	< 0.00011	< 0.00013	< 0.00014
1,2-Dichlorobenzene	5300	11	< 0.00029	< 0.00027	< 0.00023	< 0.00024	< 0.00025	< 0.00024	< 0.00024	< 0.00023	< 0.00025	< 0.00028
1,2-Dichloroethane	0.9	0.005	< 0.00037	< 0.00034	< 0.00029	< 0.00031	< 0.00032	< 0.00031	< 0.0003	< 0.00029	< 0.00032	< 0.00036
1,2-Dichloropropane	2	0.005	< 0.00014	< 0.00013	< 0.00011	< 0.00012	< 0.00012	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00014
1,3-Dichlorobenzene	5300	12	< 0.0003	< 0.00027	< 0.00023	< 0.00025	< 0.00025	< 0.00024	< 0.00024	< 0.00023	< 0.00026	< 0.00029
1,4-Dichlorobenzene	5	1	< 0.00036	< 0.00033	< 0.00028	< 0.0003	< 0.00031	< 0.0003	< 0.0003	< 0.00028	< 0.00032	< 0.00035
2-Butanone (MEK)	3100	0.6	< 0.0021	0.0112	< 0.0016	< 0.0018	< 0.0018	< 0.0018	< 0.0017	< 0.0016	< 0.0018	< 0.0021 J
2-Hexanone	NS	NS	< 0.001	< 0.00096	< 0.0008	< 0.00087	< 0.00088	< 0.00086	< 0.00085	< 0.00081	< 0.0009	< 0.001
4-methyl-2-pentanone (MIBK)	NS	NS	< 0.00088	0.0054	< 0.00068	< 0.00073	< 0.00074	< 0.00072	< 0.00071	< 0.00068	< 0.00076	< 0.00084
Acetone	70000	12	< 0.0024	< 0.0022	< 0.0019	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0019	< 0.0021	< 0.0023
Benzene	2	0.005	< 0.00037	0.00049 J	< 0.00028	< 0.00031	< 0.00031	< 0.0003	< 0.0003	< 0.00029	< 0.00032	< 0.00036
Bromodichloromethane	1	0.005	< 0.00028	< 0.00026	< 0.00021	< 0.00023	< 0.00024	< 0.00023	< 0.00023	< 0.00022	< 0.00024	< 0.00027
Bromoform	81	0.02	< 0.00016	< 0.00015	< 0.00013	< 0.00014	< 0.00014	< 0.00013	< 0.00013	< 0.00013	< 0.00014	< 0.00016
Bromomethane	25	0.03	< 0.00044	< 0.0004	< 0.00034	< 0.00036	< 0.00037	< 0.00036	< 0.00036	< 0.00034	< 0.00038	< 0.00042
Carbon disulfide	7800	4	< 0.00033	< 0.0003	< 0.00025	< 0.00027	< 0.00028	< 0.00027	< 0.00027	< 0.00026	< 0.00029	< 0.00032
Carbon tetrachloride	0.6	0.005	< 0.0006	< 0.00055	< 0.00046	< 0.0005	< 0.00051	< 0.00049	< 0.00049	< 0.00046	< 0.00052	< 0.00058
Chlorobenzene	510	0.4	< 0.00037	< 0.00034	< 0.00028	< 0.0003	< 0.00031	< 0.0003	< 0.0003	< 0.00028	< 0.00032	< 0.00035
Chloroethane	220	NS	< 0.0011	< 0.00099	< 0.00084	< 0.0009	< 0.00092	< 0.00089	< 0.00088	< 0.00084	< 0.00094	< 0.001
Chloroform	0.6	0.2	< 0.00034	< 0.00032	< 0.00027	< 0.00029	< 0.00029	< 0.00028	< 0.00028	< 0.00027	< 0.0003	< 0.00033
Chloromethane	4	NS	< 0.00018	< 0.00016	< 0.00014	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00014	< 0.00015	< 0.00017
cis-1,2-Dichloroethene	230	0.2	< 0.00026	0.0018 J	< 0.0002	< 0.00022	< 0.00022	< 0.00021	< 0.00021	< 0.0002	< 0.00022	< 0.00025
cis-1,3-Dichloropropene	2	0.005	< 0.00014	< 0.00013	< 0.00011	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00014
Cyclohexane	NS	NS	< 0.00016	< 0.00015	< 0.00013	< 0.00014	< 0.00014	< 0.00013	< 0.00013	< 0.00013	< 0.00014	< 0.00016
Dibromochloromethane	3	0.005	< 0.00012	< 0.00011	< 0.000092	< 0.000099	< 0.0001	< 0.000098	< 0.000097	< 0.000092	< 0.0001	< 0.00011
Dichlorodifluoromethane	490	25	< 0.001	< 0.00094	< 0.00079	< 0.00085	< 0.00087	< 0.00084	< 0.00083	< 0.00079	< 0.00088	< 0.00098
Ethylbenzene	7800	8	< 0.0004	0.11	< 0.00031	< 0.00033	< 0.00034	< 0.00033	< 0.00033	< 0.00031	< 0.00035	< 0.00039
Freon 113	NS	NS	< 0.00061	< 0.00056	< 0.00047	< 0.00051	< 0.00052	< 0.0005	< 0.00049	< 0.00047	< 0.00053	< 0.00059
Isopropylbenzene	NS	NS	< 0.00056	0.0043 J	< 0.00043	< 0.00047	< 0.00048	< 0.00046	< 0.00046	< 0.00043	< 0.00048	< 0.00054
Methyl acetate	78000	14	< 0.00089	< 0.00082	< 0.00069	< 0.						

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential	NJ Default Impact to	PE-1B-3.0-3.5	PE-1SW-2.5-3.0	PE-2B-3.0-3.5	PE-2B-3.0-3.5 DUP	PE-2SW-2.5-3.0	PE-3SW-2.5-3.0	PE-4SW-2.5-3.0	PE-5SW-2.5-3.0	PE-6SW-2.5-3.0	PE-NLP-S(3.5-4.0)SW
Sample Date	Direct Contact Soil (NJAC 7: 26D 6/08)	Groundwater Soil Screening (NJAC 7:26D 12/08)	4/7/2011 Final	4/7/2011 Final	4/11/2011 Final	4/11/2011 Final	4/7/2011 Final	4/7/2011 Final	4/7/2011 Final	4/11/2011 Final	4/11/2011 Final	3/14/2011 Final
Validation Status												
SVOCs												
1,1'-Biphenyl	3100	90	< 0.0041	< 0.0041	< 0.0038	< 0.0038	< 0.004	< 0.0038	< 0.0039	< 0.0038	< 0.004	< 0.0041
2,4,5-Trichlorophenol	6100	44	< 0.041	< 0.041	< 0.038	< 0.038	< 0.04	< 0.038	< 0.039	< 0.038	< 0.04	< 0.041
2,4,6-Trichlorophenol	19	0.2	< 0.034	< 0.033	< 0.03	< 0.031	< 0.033	< 0.031	< 0.032	< 0.031	< 0.032	< 0.034
2,4-Dichlorophenol	180	0.2	< 0.058	< 0.056	< 0.052	< 0.053	< 0.056	< 0.052	< 0.054	< 0.052	< 0.055	< 0.058
2,4-Dimethylphenol	1200	0.7	< 0.06	< 0.059	< 0.054	< 0.056	< 0.058	< 0.055	< 0.056	< 0.055	< 0.057	< 0.06
2,4-Dinitrophenol	120	0.3	< 0.044	< 0.043	< 0.039	< 0.04	< 0.042	< 0.04	< 0.041	< 0.04	< 0.042	< 0.044
2,4-Dinitrotoluene	0.7	NS	< 0.016	< 0.015	< 0.014	< 0.014	< 0.015	< 0.014	< 0.015	< 0.014	< 0.015	< 0.016
2,6-Dinitrotoluene	0.7	NS	< 0.014	< 0.013	< 0.012	< 0.013	< 0.013	< 0.012	< 0.013	< 0.012	< 0.013	< 0.014
2-Chloronaphthalene	NS	NS	< 0.011	< 0.011	< 0.01	< 0.01	< 0.011	< 0.01	< 0.01	< 0.01	< 0.011	< 0.011
2-Chlorophenol	310	0.5	< 0.036	< 0.035	< 0.033	< 0.033	< 0.035	< 0.033	< 0.034	< 0.033	< 0.034	< 0.036
2-Methylnaphthalene	230	5	< 0.02	< 0.02	< 0.018	< 0.018	< 0.019	0.0457 J	< 0.019	< 0.018	< 0.019	< 0.02
2-Methylphenol	310	NS	< 0.041	< 0.04	< 0.037	< 0.038	< 0.039	< 0.037	< 0.038	< 0.037	< 0.039	< 0.041
2-Nitroaniline	39	NS	< 0.016	< 0.015	< 0.014	< 0.015	< 0.015	< 0.014	< 0.015	< 0.014	< 0.015	< 0.016
2-Nitrophenol	NS	NS	< 0.038	< 0.037	< 0.034	< 0.035	< 0.037	< 0.034	< 0.036	< 0.034	< 0.036	< 0.038
3&4-Methylphenol	NS	NS	< 0.045	< 0.045	< 0.041	< 0.042	< 0.044	< 0.041	< 0.043	< 0.041	< 0.043	< 0.045
3,3'-Dichlorobenzidine	1	0.2	< 0.0091	< 0.0089	< 0.0082	< 0.0084	< 0.0088	< 0.0083	< 0.0085	< 0.0083	< 0.0087	< 0.0091
3-Nitroaniline	NS	NS	< 0.014	< 0.014	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013	< 0.013	< 0.014	< 0.014
4,6-Dinitro-2-methylphenol	6	0.3	< 0.044	< 0.043	< 0.039	< 0.04	< 0.042	< 0.04	< 0.041	< 0.04	< 0.042	< 0.044
4-Bromophenyl phenyl ether	NS	NS	< 0.013	< 0.013	< 0.012	< 0.012	< 0.013	< 0.012	< 0.012	< 0.012	< 0.012	< 0.013
4-Chloro-3-Methylphenol	NS	NS	< 0.036	< 0.035	< 0.032	< 0.033	< 0.035	< 0.033	< 0.034	< 0.033	< 0.034	< 0.036
4-Chloroaniline	NS	NS	< 0.011	< 0.011	< 0.01	< 0.011	< 0.011	< 0.01	< 0.011	< 0.011	< 0.011	< 0.011
4-Chlorophenyl phenyl ether	NS	NS	< 0.011	< 0.011	< 0.0097	< 0.01	< 0.01	< 0.0098	< 0.01	< 0.0098	< 0.01	< 0.011
4-Nitroaniline	NS	NS	< 0.014	< 0.014	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013	< 0.013	< 0.013	< 0.014
4-Nitrophenol	NS	NS	< 0.06	< 0.059	< 0.055	< 0.056	< 0.059	< 0.055	< 0.057	< 0.055	< 0.058	< 0.06
Acenaphthene	3400	74	< 0.01	< 0.01	< 0.0094	< 0.0096	< 0.01	< 0.0094	< 0.0097	< 0.0094	< 0.0099	< 0.01
Acenaphthylene	NS	NS	< 0.011	< 0.011	< 0.01	< 0.011	< 0.011	< 0.01	< 0.011	< 0.01	< 0.011	< 0.011
Acetophenone	2	2	< 0.0063	< 0.0062	< 0.0057	< 0.0058	< 0.0061	< 0.0057	< 0.0059	< 0.0057	< 0.006	< 0.0063
Anthracene	17000	1500	< 0.013	0.0154 J	< 0.011	< 0.012	< 0.012	< 0.011	< 0.012	< 0.011	< 0.012	< 0.013
Atrazine	210	0.2	< 0.007	< 0.0069	< 0.0064	< 0.0065	< 0.0068	< 0.0064	< 0.0066	< 0.0064	< 0.0067	< 0.007
Benzaldehyde	6100	NS	< 0.0082	< 0.0081	< 0.0074	< 0.0076	< 0.008	< 0.0075	< 0.0077	< 0.0075	< 0.0078	< 0.0082 J
Benzo(a)anthracene	0.6	0.5	< 0.012	0.0232 J	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
Benzo(a)pyrene	0.2	0.2	< 0.011	< 0.011	< 0.0099	< 0.01	< 0.011	< 0.0099	< 0.01	< 0.0099	< 0.01	0.018 J
Benzo(b)fluoranthene	0.6	2	< 0.012	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
Benzo(g,h,i)perylene	380000	NS	< 0.013	< 0.013	< 0.012	< 0.012	< 0.013	< 0.012	< 0.012	< 0.012	< 0.013	0.07
Benzo(k)fluoranthene	6	16	< 0.013	< 0.013	< 0.012	< 0.012	< 0.013	< 0.012	< 0.013	< 0.012	< 0.013	< 0.013
Benzyl butyl phthalate	1200	150	< 0.021	< 0.02	< 0.019	< 0.019	< 0.02	< 0.019	< 0.019	< 0.019	< 0.019	< 0.02
bis(2-Chloroethoxy)methane	NS	NS	< 0.014 J	< 0.014 J	< 0.013	< 0.013	< 0.014 J	< 0.013 J	< 0.014 J	< 0.013	< 0.014	< 0.014
bis(2-Chloroethyl)ether	0.4	0.2	< 0.011	< 0.011	< 0.0097	< 0.01	< 0.01	< 0.0098	< 0.01	< 0.0098	< 0.01	< 0.011
bis(2-Chloroisopropyl)ether	23	3	< 0.011	< 0.01	< 0.0096	< 0.0098	< 0.01	< 0.0097	< 0.01	< 0.0097	< 0.01	< 0.011
bis(2-Ethylhexyl)phthalate	35	790	< 0.032</td									

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, New Jersey

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential	NJ Default Impact to	PE-1B-3.0-3.5	PE-1SW-2.5-3.0	PE-2B-3.0-3.5	PE-2B-3.0-3.5 DUP	PE-2SW-2.5-3.0	PE-3SW-2.5-3.0	PE-4SW-2.5-3.0	PE-5SW-2.5-3.0	PE-6SW-2.5-3.0	PE-NLP-S(3.5-4.0)SW
Sample Date	Direct Contact Soil	Groundwater Soil Screening	4/7/2011	4/7/2011	4/11/2011	4/11/2011	4/7/2011	4/7/2011	4/7/2011	4/11/2011	4/11/2011	3/14/2011
Validation Status	(NJAC 7: 26D 6/08)	(NJAC 7:26D 12/08)	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final
Metals												
Aluminum	78000	3900	16400	10100	9040	9870	9820	10900	16800	14100	11400	23000
Antimony	31	6	0.59 B	1.9 B	< 0.14	< 2.3	< 0.14	< 0.14	0.39 B	< 0.14	< 0.15	0.29 B
Arsenic	19	19	3.8	4.5	3.6	3.6	3	2.9	9	3.5	3.1	9.2
Barium	16000	1300	71.4	61.2	29.7	40.4	30.6	34.3	54.5	42	41.5	103
Beryllium	16	0.5	0.57	0.37	0.41	0.41	0.37	0.5	0.74	0.63	0.52	0.71
Cadmium	78	1	< 0.6	1	< 0.039	< 0.039	< 0.58	< 0.55	0.091 J	< 0.038	< 0.04	0.57 J
Calcium	NS	NS	2080	2720	1010	1380	603	892	1410	1040	913	1730
Chromium	NS	NS	19.5	43	17	25.8	15.6	14.3	21.4	16.7	17.8	27.8
Cobalt	1600	59	9.7	6 B	6.6	8.5	7.5	7.8	21.3	10.3	8.3	11.2
Copper	3100	7300	14.1	20.5	13.9	15.9	8.8	19	16.1	18.1	15.4	40.8
Iron	NS	NS	20900	20000	18400	20600	19000	19100	43200	28300	22500	34000
Lead	400	59	20.8	392	47.3	117	24.7	5.7	27.1	8.4	9.1	104
Magnesium	NS	NS	2200	2260	2230	2780	2580	3340	4590	5200	3210	4680
Manganese	11000	42	828	332	196	345	301	417	688	573	575	339
Mercury	23	0.1	0.049	0.35	0.041	< 0.015	0.018 B	0.018 B	0.042	0.015 J	< 0.017	0.21
Nickel	1600	31	12.6	12	12	12.1	13.3	16.1	21.9	22.8	16.7	24.3
Potassium	NS	NS	872 B	727 B	784 B	982 B	699 B	707 B	1120	1060 B	1100 B	1320
Selenium	390	7	< 0.32	0.37 B	< 0.31	< 0.31	< 0.31	< 0.3	< 0.3	< 0.3	0.34 J	< 0.34
Silver	390	1	0.19 B	0.39 B	< 0.57	0.17 J	0.39 B	0.17 B	< 0.078	0.28 J	0.21 J	< 0.088
Sodium	NS	NS	107 J	102 J	187 B	179 B	< 1200	< 1100	77 J	61.2 B	63.9 B	105 B
Thallium	5	3	< 1.2	< 0.26	< 0.24	< 0.24	< 1.2	< 1.1	< 0.24	< 0.23	< 0.24	< 0.27
Vanadium	78	NS	37.5	34.5	26.1	35.5	24.5	23.2	41.5	26.4	31.8	43.4
Zinc	23000	600	43.5	49	26.4	30.3	38.8	37.7	42	48.3	35	176
Other												
Solids, Percent	NS	NS	79.7	81.2	88	85.5	82.5	87.8	84.9	87.8	83.5	80
Cyanide	1600	13	< 0.28	< 0.26	< 0.24	< 0.25	< 0.26	0.24	< 0.27	< 0.27	< 0.29	0.35

Results are reported in milligrams per kilogram (mg/kg).

Trip Blanks and Field Blanks reported in micrograms per liter (ug/l).

< Not detected.

NS No standard.

B Inorganic B: Result is between the detection limit and quantification limit.

J Estimated result.

PCB Polychlorinated biphenyls.

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Exceedences of NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)

Shaded Exceedences of NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, NJ

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)	PE-NLP-W(3.5-4.0)SW 3/14/2011 Final	PE-NLP-W(4.0-4.5)B 3/14/2011 Final	FB(031411) 3/14/2011 Final	FB(040711) 4/7/2011 Final	FB(041111) 4/11/2011 Final	TB(031411) 3/14/2011 Final	TB(040711) 4/7/2011 Final	TB(041111) 4/11/2011 Final
Validation Status										
VOCs										
1,1,1-Trichloroethane	290	0.2	< 0.00012	< 0.00012	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
1,1,2,2-Tetrachloroethane	1	0.005	< 0.00028	< 0.00028	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,1,2-Trichloroethane	2	0.01	< 0.00018	< 0.00017	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,1-Dichloroethane	8	0.2	< 0.00013	< 0.00013	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
1,1-Dichloroethene	11	0.005	< 0.00064	< 0.00063	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
1,2,4-Trichlorobenzene	73	0.4	< 0.00033	< 0.00033	< 0.56	< 0.56	< 0.56	< 0.56	< 0.56	< 0.56
1,2-Dibromo-3-Chloropropane (DBCP)	0.08	0.005	< 0.00052	< 0.00051	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
1,2-Dibromoethane	0.008	0.005	< 0.00013	< 0.00013	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
1,2-Dichlorobenzene	5300	11	< 0.00026	< 0.00026	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
1,2-Dichloroethane	0.9	0.005	< 0.00033	< 0.00033	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,2-Dichloropropane	2	0.005	< 0.00013	< 0.00012	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
1,3-Dichlorobenzene	5300	12	< 0.00027	< 0.00026	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
1,4-Dichlorobenzene	5	1	< 0.00033	< 0.00032	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
2-Butanone (MEK)	3100	0.6	< 0.0019 J	< 0.0019 J	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
2-Hexanone	NS	NS	< 0.00093	< 0.00091	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-methyl-2-pentanone (MIBK)	NS	NS	< 0.00078	< 0.00077	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
Acetone	70000	12	< 0.0022	< 0.0021	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Benzene	2	0.005	< 0.00033	< 0.00032	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Bromodichloromethane	1	0.005	< 0.00025	< 0.00024	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Bromoform	81	0.02	< 0.00015	< 0.00014	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Bromomethane	25	0.03	< 0.00039	< 0.00038	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Carbon disulfide	7800	4	< 0.00029	< 0.00029	< 0.74	< 0.74	< 0.74	< 0.74	< 0.74	< 0.74
Carbon tetrachloride	0.6	0.005	< 0.00054	< 0.00052	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
Chlorobenzene	510	0.4	< 0.00033	< 0.00032	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
Chloroethane	220	NS	< 0.00097	< 0.00095	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Chloroform	0.6	0.2	< 0.00031	< 0.0003	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Chloromethane	4	NS	< 0.00016	< 0.00016	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
cis-1,2-Dichloroethene	230	0.2	< 0.00023	< 0.00023	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
cis-1,3-Dichloropropene	2	0.005	< 0.00013	< 0.00013	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Cyclohexane	NS	NS	< 0.00015	< 0.00014	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
Dibromochloromethane	3	0.005	< 0.00011	< 0.0001	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Dichlorodifluoromethane	490	25	< 0.00091	< 0.00089	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
Ethylbenzene	7800	8	< 0.00036	0.0022	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
Freon 113	NS	NS	< 0.00054	< 0.00053	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Isopropylbenzene	NS	NS	< 0.0005	< 0.00049	< 0.57	< 0.57	< 0.57	< 0.57	< 0.57	< 0.57
Methyl acetate	78000	14	< 0.0008	< 0.00078	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Methyl tert butyl ether	110	0.2	< 0.00027	< 0.00027	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Methylcyclohexane	NS	NS	< 0.00063	< 0.00062	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Methylene chloride	34	0.007	< 0.00022	< 0.00021	< 0.3	< 0.3	2.1	< 0.3	< 0.3	< 0.3
Styrene	90	2	< 0.0001	< 0.0001	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
Tetrachloroethene	2	0.005	< 0.00014	< 0.00014	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
Toluene	6300	4	< 0.00028	0.0088	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Trans-1,2-dichloroethene	300	0.4	< 0.00043	< 0.00042	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
trans-1,3-Dichloropropene	2	0.005	< 0.00093	< 0.00091	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethene	7	0.007	< 0.00051	< 0.0005	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Trichlorofluoromethane	23000	22	< 0.00022	< 0.00022	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Vinyl Chloride	0.7	0.005	< 0.00017	< 0.00017	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Xylenes	12000	12	< 0.00045	0.0109	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Total TIC, Volatile	NS	NS	0	0	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, NJ

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)	PE-NLP-W(3.5-4.0)SW 3/14/2011 Final	PE-NLP-W(4.0-4.5)B 3/14/2011 Final	FB(031411) 3/14/2011 Final	FB(040711) 4/7/2011 Final	FB(041111) 4/11/2011 Final	TB(031411) 3/14/2011 Final	TB(040711) 4/7/2011 Final	TB(041111) 4/11/2011 Final
SVOCs										
1,1'-Biphenyl	3100	90	< 0.004	< 0.0037	< 0.42	< 0.45	< 0.42	NA	NA	NA
2,4,5-Trichlorophenol	6100	44	< 0.04	< 0.037	< 1.3	< 1.4	< 1.3	NA	NA	NA
2,4,6-Trichlorophenol	19	0.2	< 0.032	< 0.03	< 1.2	< 1.3	< 1.2	NA	NA	NA
2,4-Dichlorophenol	180	0.2	< 0.055	< 0.052	< 1.2	< 1.3	< 1.2	NA	NA	NA
2,4-Dimethylphenol	1200	0.7	< 0.057	< 0.054	< 1.7	< 1.8	< 1.7	NA	NA	NA
2,4-Dinitrophenol	120	0.3	< 0.042	< 0.039	< 0.74	< 0.79	< 0.74	NA	NA	NA
2,4-Dinitrotoluene	0.7	NS	< 0.015	< 0.014	< 0.22	< 0.24	< 0.22	NA	NA	NA
2,6-Dinitrotoluene	0.7	NS	< 0.013	< 0.012	< 0.33	< 0.35	< 0.33	NA	NA	NA
2-Chloronaphthalene	NS	NS	< 0.011	< 0.01	< 0.42	< 0.45	< 0.42	NA	NA	NA
2-Chlorophenol	310	0.5	< 0.035	< 0.033	< 1.1	< 1.2	< 1.1	NA	NA	NA
2-Methylnaphthalene	230	5	< 0.019	< 0.018	< 0.66	< 0.71	< 0.66	NA	NA	NA
2-Methylphenol	310	NS	< 0.039	< 0.037	< 1.1	< 1.2	< 1.1	NA	NA	NA
2-Nitroaniline	39	NS	< 0.015	< 0.014	< 0.24	< 0.25	< 0.24	NA	NA	NA
2-Nitrophenol	NS	NS	< 0.036	< 0.034	< 1.2	< 1.3	< 1.2	NA	NA	NA
3&4-Methylphenol	NS	NS	< 0.043	< 0.041	< 1	< 1.1	< 1	NA	NA	NA
3,3'-Dichlorobenzidine	1	0.2	< 0.0087	< 0.0082	< 0.3	< 0.32	< 0.3	NA	NA	NA
3-Nitroaniline	NS	NS	< 0.014	< 0.013	< 0.29	< 0.31	< 0.29	NA	NA	NA
4,6-Dinitro-2-methylphenol	6	0.3	< 0.042	< 0.039	< 0.51	< 0.55	< 0.51	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	< 0.012	< 0.012	< 0.35	< 0.38	< 0.35	NA	NA	NA
4-Chloro-3-Methylphenol	NS	NS	< 0.034	< 0.032	< 1.1	< 1.1	< 1.1	NA	NA	NA
4-Chloroaniline	NS	NS	< 0.011	< 0.01	< 0.25	< 0.27	< 0.25	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	< 0.01	< 0.0097	< 0.35	< 0.38	< 0.35	NA	NA	NA
4-Nitroaniline	NS	NS	< 0.013	< 0.013	< 0.18	< 0.19	< 0.18	NA	NA	NA
4-Nitrophenol	NS	NS	< 0.058	< 0.054	< 0.83 J	< 0.89	< 0.83	NA	NA	NA
Acenaphthene	3400	74	< 0.0099	< 0.0094	< 0.37	< 0.39	< 0.37	NA	NA	NA
Acenaphthylene	NS	NS	< 0.011	< 0.01	< 0.27	< 0.29	< 0.27	NA	NA	NA
Acetophenone	2	2	< 0.006	< 0.0057	< 0.4	< 0.43	< 0.4	NA	NA	NA
Anthracene	17000	1500	< 0.012	< 0.011	< 0.16	< 0.17	< 0.16	NA	NA	NA
Atrazine	210	0.2	< 0.0067	< 0.0064	< 0.39	< 0.42	< 0.39	NA	NA	NA
Benzaldehyde	6100	NS	< 0.0079 J	< 0.0074 J	< 0.4	< 0.43	< 0.4	NA	NA	NA
Benzo(a)anthracene	0.6	0.5	< 0.011	< 0.011	< 0.12	< 0.13	< 0.12	NA	NA	NA
Benzo(a)pyrene	0.2	0.2	< 0.01	< 0.0098	< 0.095	< 0.1	< 0.095	NA	NA	NA
Benzo(b)fluoranthene	0.6	2	< 0.011	< 0.011	< 0.25	< 0.26	< 0.25	NA	NA	NA
Benzo(g,h,i)perylene	380000	NS	< 0.013	< 0.012	< 0.12	< 0.13	< 0.12	NA	NA	NA
Benzo(k)fluoranthene	6	16	< 0.013	< 0.012	< 0.38	< 0.41	< 0.38	NA	NA	NA
Benzyl butyl phthalate	1200	150	< 0.02	< 0.019	< 0.25	< 0.27	< 0.25	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	< 0.014	< 0.013	< 0.25	< 0.27	< 0.25	NA	NA	NA
bis(2-Chloroethyl)ether	0.4	0.2	< 0.01	< 0.0097	< 0.31	< 0.33	< 0.31	NA	NA	NA
bis(2-Chloroisopropyl)ether	23	3	< 0.01	< 0.0096	< 0.39	< 0.42	< 0.39	NA	NA	NA
bis(2-Ethylhexyl)phthalate	35	790	< 0.068	< 0.028	< 0.33	< 0.35	< 0.33	NA	NA	NA
Caprolactam	31000	8	< 0.011	< 0.01	< 0.2	< 0.21	< 0.2	NA	NA	NA
Carbazole	24	NS	< 0.016	< 0.015	< 0.17	< 0.18	< 0.17	NA	NA	NA
Chrysene	62	52	< 0.012	< 0.011	< 0.11	< 0.12	< 0.11	NA	NA	NA
Dibenzo(a,h)anthracene	0.2	0.5	< 0.012	< 0.011	< 0.15	< 0.16	< 0.15	NA	NA	NA
Dibenzofuran	NS	NS	< 0.01	< 0.0096	< 0.3	< 0.33	< 0.3	NA	NA	NA
Diethyl phthalate	49000	57	< 0.012	< 0.011	< 0.17	< 0.18	< 0.17	NA	NA	NA
Dimethyl phthalate	NS	NS	0.094	0.0403 J	< 0.23	< 0.24	< 0.23	NA	NA	NA
di-n-butyl phthalate	6100	620	< 0.0076	< 0.0072	< 0.19	< 0.21	< 0.19	NA	NA	NA
di-n-octylphthalate	2400	3300	< 0.017	< 0.016	< 0.4	< 0.42	< 0.4	NA	NA	NA
Fluoranthene	2300	840	< 0.015	< 0.014	< 0.17	< 0.18	< 0.17	NA	NA	NA
Fluorene	2300	110	< 0.011	< 0.011	< 0.27	< 0.29	< 0.27	NA	NA	NA
Hexachlorobenzene	0.3	0.2	< 0.011	< 0.011	< 0.27	< 0.28	< 0.27	NA	NA	NA
Hexachlorobutadiene	6	0.6	< 0.0095	< 0.009	< 0.13	< 0.14	< 0.13	NA	NA	NA

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, NJ

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)	PE-NLP-W(3.5-4.0)SW 3/14/2011 Final	PE-NLP-W(4.0-4.5)B 3/14/2011 Final	FB(031411) 3/14/2011 Final	FB(040711) 4/7/2011 Final	FB(041111) 4/11/2011 Final	TB(031411) 3/14/2011 Final	TB(040711) 4/7/2011 Final	TB(041111) 4/11/2011 Final
Validation Status										
Hexachlorocyclopentadiene	45	210	< 0.035 J	< 0.033 J	< 0.24	< 0.26	< 0.24	NA	NA	NA
Hexachloroethane	35	0.2	< 0.0095	< 0.009	< 0.21	< 0.22	< 0.21	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	5	< 0.012	< 0.011	< 0.13	< 0.14	< 0.13	NA	NA	NA
Isophrone	510	0.2	< 0.0092	< 0.0087	< 0.25	< 0.27	< 0.25	NA	NA	NA
Naphthalene	6	16	< 0.0093	< 0.0088	< 0.43	< 0.46	< 0.43	NA	NA	NA
Nitrobenzene	31	0.2	< 0.0099	< 0.0093	< 0.25	< 0.27	< 0.25	NA	NA	NA
N-Nitroso-di-n-Propylamine	0.2	0.2	< 0.0083	< 0.0079	< 0.44	< 0.47	< 0.44	NA	NA	NA
N-Nitrosodiphenylamine	99	0.2	< 0.02	< 0.019	< 0.22	< 0.23	< 0.22	NA	NA	NA
Pentachlorophenol	3	0.3	< 0.058	< 0.055	< 0.8	< 0.86	< 0.8	NA	NA	NA
Phenanthrene	NS	NS	< 0.016	< 0.015	< 0.21	< 0.23	< 0.21	NA	NA	NA
Phenol	18000	5	< 0.036	< 0.034	< 0.58	< 0.62	< 0.58	NA	NA	NA
Pyrene	1700	550	< 0.013	< 0.012	< 0.16	< 0.17	< 0.16	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	1.36 J	1.46 J	NA	4.5 J	NA	NA	NA	NA
Pesticides										
4,4-DDD	3	3	< 0.0006	< 0.00057	< 0.0036	< 0.0038	< 0.0036	NA	NA	NA
4,4-DDE	2	12	< 0.00049	< 0.00046	< 0.0021	< 0.0022	< 0.0021	NA	NA	NA
4,4-DDT	2	7	< 0.00059	< 0.00056	< 0.0038	< 0.004	< 0.0038	NA	NA	NA
Aldrin	0.04	0.1	< 0.00063	< 0.0006	< 0.009	< 0.0095	< 0.009	NA	NA	NA
alpha-BHC	0.1	0.002	< 0.00043	< 0.00041	< 0.0023	< 0.0024	< 0.0023	NA	NA	NA
alpha-Chlordane	0.2	0.03	< 0.00047	< 0.00045	< 0.003	< 0.0032	< 0.003	NA	NA	NA
beta-BHC	0.4	0.002	< 0.00068	< 0.00065	< 0.0037	< 0.0039	< 0.0037	NA	NA	NA
delta-BHC	NS	NS	< 0.00039	< 0.00036	< 0.0043	< 0.0045	< 0.0043	NA	NA	NA
Dieldrin	0.04	0.003	< 0.00047	< 0.00045	< 0.0014	< 0.0015	< 0.0014	NA	NA	NA
Endosulfan I (alpha)	470	2	< 0.00048	< 0.00046	< 0.0023	< 0.0024	< 0.0023	NA	NA	NA
Endosulfan II (beta)	470	2	< 0.00054	< 0.00051	< 0.0033	< 0.0036	< 0.0033	NA	NA	NA
Endosulfan sulfate	470	1	< 0.00054	< 0.00051	< 0.0067	< 0.0072	< 0.0067	NA	NA	NA
Endrin	23	0.6	< 0.00049	< 0.00046	< 0.0013	< 0.0014	< 0.0013	NA	NA	NA
Endrin Aldehyde	NS	NS	< 0.00066	< 0.00063	< 0.0035	< 0.0037	< 0.0035	NA	NA	NA
Endrin ketone	NS	NS	< 0.0005	< 0.00047	< 0.0074	< 0.0079	< 0.0074	NA	NA	NA
gamma-Chlordane	0.2	0.03	< 0.00055	< 0.00052	< 0.0024	< 0.0025	< 0.0024	NA	NA	NA
Heptachlor	0.1	0.3	< 0.00063	< 0.0006	< 0.0038	< 0.0041	< 0.0038	NA	NA	NA
Heptachlor epoxide	0.07	0.009	< 0.00054	< 0.00051	< 0.0025	< 0.0026	< 0.0025	NA	NA	NA
Lindane	0.4	0.002	< 0.00044	< 0.00041	< 0.0017	< 0.0018	< 0.0017	NA	NA	NA
Methoxychlor	390	100	< 0.00063	< 0.00059	< 0.0069	< 0.0073	< 0.0069	NA	NA	NA
Toxaphene	0.6	0.2	< 0.016	< 0.016	< 0.25	< 0.27	< 0.25	NA	NA	NA
PCBs										
PCB 1016	0.2	0.2	< 0.013	< 0.012	< 0.3	< 0.32	< 0.3	NA	NA	NA
PCB 1221	0.2	0.2	< 0.023	< 0.022	< 0.41	< 0.44	< 0.41	NA	NA	NA
PCB 1232	0.2	0.2	< 0.011	< 0.011	< 0.31	< 0.33	< 0.31	NA	NA	NA
PCB 1242	0.2	0.2	< 0.013	< 0.012	< 0.27	< 0.29	< 0.27	NA	NA	NA
PCB 1248	0.2	0.2	< 0.007	< 0.0066	< 0.28	< 0.3	< 0.28	NA	NA	NA
PCB 1254	0.2	0.2	< 0.0089	< 0.0084	< 0.18	< 0.19	< 0.18	NA	NA	NA
PCB 1260	0.2	0.2	< 0.014	< 0.013	< 0.14	< 0.15	< 0.14	NA	NA	NA
Total PCBs	0.2	0.2	0	0	0	0	0	NA	NA	NA

Table 1. Summary of Soil Analytical Results, Ringwood Mines/Landfill Site, Ringwood, NJ

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)	PE-NLP-W(3.5-4.0)SW 3/14/2011 Final	PE-NLP-W(4.0-4.5)B 3/14/2011 Final	FB(031411) 3/14/2011 Final	FB(040711) 4/7/2011 Final	FB(041111) 4/11/2011 Final	TB(031411) 3/14/2011 Final	TB(040711) 4/7/2011 Final	TB(041111) 4/11/2011 Final
Metals										
Aluminum	78000	3900	27200	18800	< 7.2	< 7.2	< 7.2	NA	NA	NA
Antimony	31	6	< 0.15	< 0.14	< 1.3	< 1.3	< 1.3	NA	NA	NA
Arsenic	19	19	5	4.4	< 0.92	< 0.92	< 0.92	NA	NA	NA
Barium	16000	1300	88.2	48.4	< 0.44	< 0.44	< 0.44	NA	NA	NA
Beryllium	16	0.5	0.95	0.98	< 0.24	< 0.24	< 0.13	NA	NA	NA
Cadmium	78	1	< 0.62	< 0.56	< 0.17	0.2 B	< 0.17	NA	NA	NA
Calcium	NS	NS	1160	1310	< 9	18.1 B	36.9 B	NA	NA	NA
Chromium	NS	NS	25.7	23.9	< 0.9	< 0.9	< 0.9	NA	NA	NA
Cobalt	1600	59	10.3	13.6	< 0.3	< 0.3	< 0.3	NA	NA	NA
Copper	3100	7300	25.6	74.5	< 0.85	< 0.85	< 0.85	NA	NA	NA
Iron	NS	NS	25700	24900	< 7.7	< 7.7	27 B	NA	NA	NA
Lead	400	59	18.9	11.6	< 0.94	< 0.94	< 0.94	NA	NA	NA
Magnesium	NS	NS	4320	4610	< 17	< 17	< 17	NA	NA	NA
Manganese	11000	42	194	279	< 0.18	< 0.18	< 0.18	NA	NA	NA
Mercury	23	0.1	0.036 B	0.06	< 0.088	< 0.088	< 0.088	NA	NA	NA
Nickel	1600	31	22.2	22.3	< 0.41	< 0.41	< 0.41	NA	NA	NA
Potassium	NS	NS	1000 B	1050 B	16.6 B	23.7 B	< 16	NA	NA	NA
Selenium	390	7	< 0.33	< 0.3	< 1.5	< 1.5	< 1.5	NA	NA	NA
Silver	390	1	< 0.085	< 0.077	< 0.72	< 0.72	< 0.72	NA	NA	NA
Sodium	NS	NS	69.9 J	168 B	72.9 B	150 B	20.9 B	NA	NA	NA
Thallium	5	3	< 0.26	< 0.23	0.4 B	< 0.17	< 0.17	NA	NA	NA
Vanadium	78	NS	41.8	41.8	< 0.43	< 0.43	< 0.43	NA	NA	NA
Zinc	23000	600	53.4	39.9	< 1.7	< 1.7	< 1.7	NA	NA	NA
Other										
Solids, Percent	NS	NS	83.4	88.1	NA	NA	NA	NA	NA	NA
Cyanide	1600	13	< 0.27	< 0.26	< 0.01	< 0.01	< 0.01	NA	NA	NA

Results are reported in milligrams per kilogram (mg/kg).

Trip Blanks and Field Blanks reported in micrograms per liter (ug/l).

< Not detected.

NS No standard.

B Inorganic B: Result is between the detection limit and quantification limit.

J Estimated result.

PCB Polychlorinated biphenyls.

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Exceedences of NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)

Shaded Exceedences of NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-1B(4.5-5.0) 12/16/2011 4 - 5 Final	PE-1SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-2B(2.5-3.0) 12/16/2011 2.5 - 3 Final	PE-2SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-3B(6.0-6.5) 12/19/2011 6 - 6.5 Final	PE-3SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-4B(9.5-10.0) 12/19/2011 9.5 - 10 Final	
Sample Date												
Depth Interval												
Validation Status												
VOCs												
1,1,1-Trichloroethane	290	0.2	210	50	< 0.014	< 0.00023	< 0.00023	< 0.00023	< 0.012	< 0.014	< 0.012	
1,1,2,2-Tetrachloroethane	1	0.005	34	1	< 0.011	< 0.00017	< 0.00017	< 0.00017	< 0.0089	< 0.01	< 0.0086	
1,1,2-Trichloroethane	2	0.01	22	1	< 0.025	< 0.00041	< 0.00041	< 0.00041	< 0.022	< 0.025	< 0.021	
1,1-Dichloroethane	8	0.2	570	10	< 0.013	< 0.00021	< 0.0002	< 0.0002	< 0.011	< 0.013	< 0.011	
1,1-Dichloroethene	11	0.005	8	10	< 0.036	< 0.00058	< 0.00058	< 0.00057	< 0.031	< 0.036	< 0.03	
1,2,4-Trichlorobenzene	73	0.4	68	100	< 0.02	< 0.00032	< 0.00032	< 0.00032	< 0.017	< 0.02	< 0.016	
1,2-Dibromo-3-Chloropropane (DBCP)	0.08	0.005	NS	NS	< 0.089	< 0.0014	< 0.0014	< 0.0014	< 0.075	< 0.088	< 0.073	
1,2-Dibromoethane	0.008	0.005	NS	NS	< 0.014	< 0.00023	< 0.00022	< 0.00022	< 0.012	< 0.014	< 0.011	
1,2-Dichlorobenzene	5300	11	5100	50	< 0.016	< 0.00026	< 0.00026	< 0.00026	< 0.014	< 0.016	< 0.013	
1,2-Dichloroethane	0.9	0.005	6	1	< 0.011	< 0.00017	< 0.00017	< 0.00017	< 0.0091	< 0.011	< 0.0088	
1,2-Dichloropropane	2	0.005	10	NS	< 0.016	< 0.00025	< 0.00025	< 0.00025	< 0.013	< 0.016	< 0.013	
1,3-Dichlorobenzene	5300	12	5100	100	< 0.011	< 0.00018	< 0.00018	< 0.00018	< 0.0096	< 0.011	< 0.0093	
1,4-Dichlorobenzene	5	1	570	100	< 0.01	< 0.00016	< 0.00016	< 0.00016	< 0.0085	< 0.01	< 0.0082	
2-Butanone (MEK)	3100	0.6	1000	50	0.31 J	< 0.0041	< 0.0041	< 0.0041	0.386 J	< 0.25	< 0.21	
2-Hexanone	NS	NS	NS	NS	< 0.15	< 0.0024	< 0.0023	< 0.0023	< 0.12	< 0.15	< 0.12	
4-methyl-2-pentanone (MIBK)	NS	NS	1000	50	9.49	< 0.0025	0.0491	< 0.0025	0.5	< 0.15	1.42	
Acetone	70000	12	1000	100	5.04	< 0.0063	0.0239	< 0.0062	1.28	< 0.39	2.59	
Benzene	2	0.005	3	1	0.0389 J	0.0016	0.0011	< 0.00012	< 0.0066	< 0.0078	0.106	
Bromodichloromethane	1	0.005	11	1	< 0.013	< 0.00021	< 0.00021	< 0.00021	< 0.011	< 0.013	< 0.011	
Bromoform	81	0.02	86	1	< 0.044	< 0.00072	< 0.00071	< 0.00071	< 0.038	< 0.044	< 0.036	
Bromomethane	25	0.03	79	1	< 0.023	< 0.00037	< 0.00037	< 0.00037	< 0.02	< 0.023	< 0.019	
Carbon disulfide	7800	4	NS	NS	< 0.012	< 0.00019	< 0.00018	< 0.00018	< 0.0098	< 0.011	< 0.0094	
Carbon tetrachloride	0.6	0.005	2	1	< 0.02	< 0.00033	< 0.00033	< 0.00032	< 0.017	< 0.02	< 0.017	
Chlorobenzene	510	0.4	37	1	< 0.019	< 0.00031	< 0.0003	< 0.0003	< 0.016	< 0.019	< 0.016	
Chloroethane	220	NS	NS	NS	< 0.024	< 0.00039	< 0.00038	< 0.00038	< 0.02	< 0.024	< 0.02	
Chloroform	0.6	0.2	19	1	< 0.028	< 0.00046	< 0.00045	< 0.00045	< 0.024	< 0.028	< 0.023	
Chloromethane	4	NS	520	10	< 0.037	< 0.00059	< 0.00059	< 0.00058	< 0.031	< 0.037	< 0.03	
cis-1,2-Dichloroethene	230	0.2	79	1	0.429	< 0.00031	0.0052	< 0.0003	< 0.016	< 0.019	0.0544 J	
cis-1,3-Dichloropropene	2	0.005	4	1	< 0.0089	< 0.00014	< 0.00014	< 0.00014	< 0.0076	< 0.0089	< 0.0073	
Cyclohexane	NS	NS	NS	NS	< 0.022	< 0.00036	0.00068 J	< 0.00035	< 0.019	< 0.022	0.102 J	
Dibromochloromethane	3	0.005	110	1	< 0.0099	< 0.00016	< 0.00016	< 0.00016	< 0.0084	< 0.0098	< 0.0081	
Dichlorodifluoromethane	490	25	NS	NS	< 0.019	< 0.00031	< 0.0003	< 0.0003	< 0.016	< 0.019	< 0.015	
Ethylbenzene	7800	8	1000	100	0.551	0.0019	0.0967	0.00032 J	1.05	0.285	82.2	
Freon 113	NS	NS	NS	NS	< 0.042	< 0.00068	< 0.00067	< 0.00067	< 0.036	< 0.042	< 0.035	
Isopropylbenzene	NS	NS	NS	NS	0.232 J	0.0084	0.0045 J	< 0.00013	0.0672 J	0.0306 J	8.16	
Methyl acetate	78000	14	NS	NS	< 0.13	< 0.0021	< 0.0021	< 0.0021	0.6	< 0.13	< 0.11	
Methyl tert butyl ether	110	0.2	NS	NS	< 0.011	< 0.00017	< 0.00017	< 0.00017	< 0.0089	< 0.01	< 0.0086	
Methylcyclohexane	NS	NS	NS	NS	< 0.014	0.00065 J	0.0023 J	< 0.00023	0.0567 J	0.022 J	0.769	
Methylene chloride	34	0.007	49	1	0.601	< 0.00022	0.0134	< 0.00022	0.0799 J	< 0.013	0.954	
Styrene	90	2	23	100	< 0.011	< 0.00018	< 0.00017	< 0.00017	< 0.0092	< 0.011	< 0.0089	
Tetrachloroethene	2	0.005	4	1	0.0422 J	< 0.00018	0.0747	< 0.00018	0.126 J	0.0181 J	2.35	
Toluene	6300	4	1000	500	2.39	0.0035	0.135	0.0007 J	1.25	0.305	41.3	
Trans-1,2-dichloroethene	300	0.4	1000	50	0.0296 J	0.00052 J	0.00059 J	< 0.0004	< 0.021	< 0.025	0.0204 J	
trans-1,3-Dichloropropene	2	0.005	4	1	< 0.02	< 0.00032	< 0.00032	< 0.00031	< 0.017	< 0.02	< 0.016	
Trichloroethene	7	0.007	23	1	0.223 J	< 0.00023	0.0682	< 0.00023	0.0273 J	0.0205 J	0.514	
Trichlorofluoromethane	23000											

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-1B(4.5-5.0) 12/16/2011 4 - 5 Final	PE-1SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-2B(2.5-3.0) 12/16/2011 2.5 - 3 Final	PE-2SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-3B(6.0-6.5) 12/19/2011 6 - 6.5 Final	PE-3SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-4B(9.5-10.0) 12/19/2011 9.5 - 10 Final	
SVOCs												
1,1'-Biphenyl	3100	90	NS	NS	< 0.004	< 0.0039	< 0.0039	< 0.004	< 0.0037	< 0.004	0.14	
2,4,5-Trichlorophenol	6100	44	5600	50	< 0.04	< 0.039	< 0.039	< 0.04	< 0.037	< 0.04	< 0.037	
2,4,6-Trichlorophenol	19	0.2	62	10	< 0.033	< 0.032	< 0.032	< 0.032	< 0.03	< 0.033	< 0.03	
2,4-Dichlorophenol	180	0.2	170	10	< 0.056	< 0.054	< 0.055	< 0.055	< 0.051	< 0.056	< 0.051	
2,4-Dimethylphenol	1200	0.7	1100	10	< 0.058	< 0.057	< 0.057	< 0.057	< 0.053	< 0.058	< 0.053	
2,4-Dinitrophenol	120	0.3	110	10	< 0.042	< 0.041	< 0.041	< 0.042	< 0.039	< 0.042	< 0.038	
2,4-Dinitrotoluene	0.7	NS	1	10	< 0.015	< 0.015	< 0.015	< 0.015	< 0.014	< 0.015	< 0.014	
2,6-Dinitrotoluene	0.7	NS	1	10	< 0.013	< 0.013	< 0.013	< 0.013	< 0.012	< 0.013	< 0.012	
2-Chloronaphthalene	NS	NS	NS	NS	< 0.011	< 0.01	< 0.01	< 0.011	< 0.0098	< 0.011	< 0.0098	
2-Chlorophenol	310	0.5	280	10	< 0.035	< 0.034	< 0.034	< 0.035	< 0.032	< 0.035	< 0.032	
2-Methylnaphthalene	230	5	NS	NS	< 0.019	< 0.019	0.0548 J	< 0.019	< 0.018	< 0.019	3.54	
2-Methylphenol	310	NS	2800	NS	< 0.039	< 0.038	< 0.039	< 0.039	< 0.036	< 0.039	< 0.036	
2-Nitroaniline	39	NS	NS	NS	< 0.015	< 0.015	< 0.015	< 0.015	< 0.014	< 0.015	< 0.014	
2-Nitrophenol	NS	NS	NS	NS	< 0.037	< 0.036	< 0.036	< 0.036	< 0.034	< 0.037	< 0.033	
3&4-Methylphenol	NS	NS	NS	NS	< 0.044	< 0.043	< 0.043	< 0.043	< 0.04	< 0.044	< 0.04	
3,3'-Dichlorobenzidine	1	0.2	2	100	< 0.0088	< 0.0086	< 0.0086	< 0.0087	< 0.008	< 0.0088	< 0.008	
3-Nitroaniline	NS	NS	NS	NS	< 0.014	< 0.013	< 0.014	< 0.014	< 0.013	< 0.014	< 0.013	
4,6-Dinitro-2-methylphenol	6	0.3	NS	NS	< 0.042	< 0.041	< 0.041	< 0.042	< 0.039	< 0.042	< 0.038	
4-Bromophenyl phenyl ether	NS	NS	NS	NS	< 0.013	< 0.012	< 0.012	< 0.012	< 0.011	< 0.013	< 0.011	
4-Chloro-3-Methylphenol	NS	NS	10000	100	< 0.035	< 0.034	< 0.034	< 0.034	< 0.032	< 0.035	< 0.032	
4-Chloroaniline	NS	NS	230	NS	< 0.011	< 0.011	< 0.011	< 0.011	< 0.01	< 0.011	< 0.01	
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0095	< 0.01	< 0.0095	
4-Nitroaniline	NS	NS	NS	NS	< 0.014	< 0.013	< 0.013	< 0.013	< 0.012	< 0.013	< 0.012	
4-Nitrophenol	NS	NS	NS	NS	< 0.059	< 0.057	< 0.057	< 0.058	< 0.053	< 0.058	< 0.053	
Acenaphthene	3400	74	3400	100	< 0.01	< 0.0098	< 0.0098	< 0.0099	< 0.0092	< 0.01	0.524	
Acenaphthylene	NS	NS	NS	NS	< 0.011	< 0.011	< 0.011	< 0.011	< 0.01	< 0.011	< 0.01	
Acetophenone	2	2	NS	NS	< 0.0061	< 0.0059	< 0.006	< 0.006	< 0.0056	< 0.0061	< 0.0055	
Anthracene	17000	1500	10000	100	< 0.012	< 0.012	< 0.012	< 0.012	< 0.011	< 0.012	0.459	
Atrazine	210	0.2	NS	NS	< 0.0068	< 0.0066	< 0.0067	< 0.0067	< 0.0062	< 0.0068	< 0.0062	
Benzaldehyde	6100	NS	NS	NS	< 0.008	< 0.0077	< 0.0078	< 0.0079	< 0.0073	< 0.008	< 0.0072	
Benzo(a)anthracene	0.6	0.5	0.9	500	< 0.011	< 0.011	< 0.011	< 0.011	< 0.01	< 0.011	0.0478	
Benzo(a)pyrene	0.2	0.2	0.66	100	< 0.011	< 0.01	< 0.01	< 0.01	< 0.0096	< 0.011	0.0215 J	
Benzo(b)fluoranthene	0.6	2	0.9	50	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	0.0283 J	
Benzo(g,h,i)perylene	380000	NS	NS	NS	< 0.013	< 0.013	< 0.013	< 0.013	< 0.012	< 0.013	0.0178 J	
Benzo(k)fluoranthene	6	16	0.9	500	< 0.013	< 0.013	< 0.013	< 0.013	< 0.012	< 0.013	0.0214 J	
Benzyl butyl phthalate	1200	150	1100	100	< 0.02	< 0.02	0.574	< 0.02	0.0458 J	< 0.02	0.0762	
bis(2-Chloroethoxy)methane	NS	NS	NS	NS	< 0.014	< 0.014	< 0.014	< 0.014	< 0.013	< 0.014	< 0.013	
bis(2-Chloroethyl)ether	0.4	0.2	0.66	10	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0095	< 0.01	< 0.0095	
bis(2-Chloroisopropyl)ether	23	3	2300	10	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0094	< 0.01	< 0.0094	
bis(2-Ethylhexyl)phthalate	35	790	49	100	0.288	0.0488 J	4.96	< 0.03	0.658	0.131	457	
Caprolactam	31000	8	NS	NS	< 0.011	< 0.011	< 0.011	< 0.011	< 0.01	< 0.011	< 0.0099	
Carbazole	24	NS	NS	NS	< 0.016	< 0.016	< 0.016	< 0.016	< 0.015	< 0.016	< 0.015	
Chrysene	62	52	9	500	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	0.0594	
Dibenzo(a,h)anthracene	0.2	0.5	0.66	100	< 0.012	< 0.011	< 0.012	< 0.012	< 0.011	< 0.012	< 0.011	
Dibenzofuran	NS	NS	NS	NS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0094	< 0.01	0.424	
Diethyl phthalate	49000	57	10000	50	< 0.012	< 0.011	< 0.012	< 0.012	< 0.011	< 0.012	< 0.011	
Dimethyl phthalate	NS	NS	10000	50	0.0379 J	< 0.012	< 0.012	< 0.012	0.0564 J	0.0428 J	0.0433 J	
di-n-butyl phthalate	6100	620	5700	100	< 0.0077	< 0.0075	< 0.0075	< 0.0076	< 0.007	< 0.0077	0.137	
di-n-octylphthalate	2400	3300	1100	100	< 0.017	< 0.016	< 0.016	< 0.017	< 0.015	&		

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-1B(4.5-5.0) 12/16/2011 4.5 - 5 Final	PE-1SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-2B(2.5-3.0) 12/16/2011 2.5 - 3 Final	PE-2SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-3B(6.0-6.5) 12/19/2011 6 - 6.5 Final	PE-3SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-4B(9.5-10.0) 12/19/2011 9.5 - 10 Final	
Sample Date												
Depth Interval												
Validation Status												
Hexachlorobenzene	0.3	0.2	0.66	100	< 0.011	< 0.011	< 0.011	< 0.011	< 0.01	< 0.011	< 0.01	< 0.01
Hexachlorobutadiene	6	0.6	1	100	< 0.0096	< 0.0094	< 0.0094	< 0.0095	< 0.0088	< 0.0096	< 0.0088	< 0.0088
Hexachlorocyclopentadiene	45	210	400	100	< 0.035	< 0.034	< 0.035	< 0.035	< 0.032	< 0.035	< 0.035	< 0.032
Hexachloroethane	35	0.2	6	100	< 0.0096	< 0.0094	< 0.0094	< 0.0095	< 0.0088	< 0.0096	< 0.0088	< 0.0088
Indeno(1,2,3-cd)pyrene	0.6	5	0.9	500	< 0.012	< 0.012	< 0.012	< 0.012	< 0.011	< 0.012	< 0.012	0.0145 J
Isophrone	510	0.2	1100	50	< 0.0093	< 0.0091	< 0.0091	< 0.0092	< 0.0085	< 0.0093	< 0.0093	< 0.0085
Naphthalene	6	16	230	100	0.0187 J	< 0.0092	0.229	< 0.0093	0.0462	0.0205 J	10.8	
Nitrobenzene	31	0.2	28	50	< 0.01	< 0.0097	< 0.0098	< 0.0099	< 0.0091	< 0.01	< 0.0091	
N-Nitroso-di-n-Propylamine	0.2	0.2	0.66	10	< 0.0085	< 0.0082	< 0.0083	< 0.0083	< 0.0077	< 0.0084	< 0.0077	
N-Nitrosodiphenylamine	99	0.2	140	1000	< 0.021	< 0.02	< 0.02	< 0.02	< 0.019	< 0.021	< 0.019	
Pentachlorophenol	3	0.3	6	100	< 0.059	< 0.058	< 0.058	< 0.059	< 0.054	< 0.059	< 0.054	
Phenanthrene	NS	NS	NS	NS	< 0.016	< 0.015	0.0446	< 0.016	< 0.014	< 0.016	7.4	
Phenol	18000	5	10000	50	< 0.036	< 0.035	< 0.036	< 0.036	0.0579 J	< 0.036	0.143	
Pyrene	1700	550	1700	100	< 0.013	< 0.013	< 0.013	< 0.013	< 0.012	< 0.013	0.323	
Total TIC, Semi-Volatile	NS	NS	NS	NS	21.04 J	0.52 J	9.9 J	0	25.83 J	0.3 J	72.2 J	
Pesticides												
4,4-DDD	3	3	3	50	< 0.00037	< 0.00036	< 0.00036	< 0.00036	< 0.00033	< 0.00036	< 0.00033	
4,4-DDE	2	12	2	50	< 0.00042	< 0.00041	< 0.00041	< 0.00042	< 0.00038	< 0.00042	< 0.00038	
4,4-DDT	2	7	2	500	< 0.00052	< 0.00051	< 0.00051	< 0.00052	< 0.00048	< 0.00052	< 0.00048	
Aldrin	0.04	0.1	0.04	50	< 0.00036	< 0.00035	< 0.00035	< 0.00035	< 0.00032	< 0.00036	< 0.00032	
alpha-BHC	0.1	0.002	NS	NS	< 0.00053	< 0.00052	< 0.00052	< 0.00053	< 0.00049	< 0.00053	< 0.00049	
alpha-Chlordane	0.2	0.03	NS	NS	< 0.00046	< 0.00045	< 0.00045	< 0.00046	< 0.00042	< 0.00046	< 0.00042	
beta-BHC	0.4	0.002	NS	NS	< 0.0005	< 0.00049	< 0.00049	< 0.00049	< 0.00046	< 0.0005	< 0.00046	
delta-BHC	NS	NS	NS	NS	< 0.00042	< 0.00041	< 0.00041	< 0.00041	< 0.00038 J	< 0.00042	< 0.00038 J	
Dieldrin	0.04	0.003	0.042	50	< 0.00055	< 0.00054	< 0.00054	< 0.00055	< 0.0005	< 0.00055	< 0.0005	
Endosulfan I (alpha)	470	2	NS	NS	< 0.00035	< 0.00034	< 0.00034	< 0.00034	< 0.00031	< 0.00034	< 0.00031	
Endosulfan II (beta)	470	2	NS	NS	< 0.00047	< 0.00046	< 0.00046	< 0.00046	< 0.00043	< 0.00047	< 0.00043	
Endosulfan sulfate	470	1	NS	NS	< 0.00065	< 0.00063	< 0.00063	< 0.00064	< 0.00059	< 0.00064	< 0.00059	
Endrin	23	0.6	17	50	< 0.00036	< 0.00035	< 0.00036	< 0.00036	< 0.00033	< 0.00036	< 0.00033	
Endrin Aldehyde	NS	NS	NS	NS	< 0.00068	< 0.00066	< 0.00066	< 0.00067	< 0.00062	< 0.00068	< 0.00061	
Endrin ketone	NS	NS	NS	NS	< 0.00046	< 0.00045	< 0.00045	< 0.00046	< 0.00042	< 0.00046	< 0.00042	
gamma-Chlordane	0.2	0.03	NS	NS	< 0.00036	< 0.00035	< 0.00036	< 0.00036	< 0.00033	< 0.00036	< 0.00033	
Heptachlor	0.1	0.3	0.15	50	< 0.00044	< 0.00043	< 0.00043	< 0.00043	< 0.0004	< 0.00044	< 0.0004	
Heptachlor epoxide	0.07	0.009	NS	NS	< 0.00035	< 0.00034	< 0.00034	< 0.00035	< 0.00032	< 0.00035	< 0.00032	
Lindane	0.4	0.002	0.52	50	< 0.00033	< 0.00032	< 0.00032	< 0.00032	< 0.0003	< 0.00032	< 0.0003	
Methoxychlor	390	100	280	50	< 0.0005	< 0.00049	< 0.00049	< 0.0005	< 0.00046	< 0.0005	< 0.00046	
Toxaphene	0.6	0.2	0.1	50	< 0.009	< 0.0087	< 0.0088	< 0.0089	< 0.0082	< 0.009	< 0.0082	
PCBs												
PCB 1016	0.2	0.2	0.49	50	< 0.0093	< 0.009	< 0.0091	< 0.0092	< 0.0085	< 0.0093	< 0.0084	
PCB 1221	0.2	0.2	0.49	50	< 0.021	< 0.021	< 0.021	< 0.021	< 0.02	< 0.021	< 0.02	
PCB 1232	0.2	0.2	0.49	50	< 0.018	< 0.018	< 0.018	< 0.018	< 0.016	< 0.018	< 0.016	
PCB 1242	0.2	0.2	0.49	50	< 0.011	< 0.011	< 0.011	< 0.011	< 0.01	< 0.011	< 0.01	
PCB 1248	0.2	0.2	0.49	50	< 0.011	< 0.011	< 0.011	< 0.011	< 0.0099	< 0.011	< 0.0099	
PCB 1254	0.2	0.2	0.49	50	< 0.017	< 0.016	< 0.016	< 0.016	< 0.015	< 0.017	< 0.015	
PCB 1260	0.2	0.2	0.49	50	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.011	
Total PCBs	0.2	0.2										

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-1B(4.5-5.0) 12/16/2011 4.5 - 5 Final	PE-1SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-2B(2.5-3.0) 12/16/2011 2.5 - 3 Final	PE-2SW(4.0-4.5) 12/16/2011 4 - 4.5 Final	PE-3B(6.0-6.5) 12/19/2011 6 - 6.5 Final	PE-3SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-4B(9.5-10.0) 12/19/2011 9.5 - 10 Final	
Sample Date												
Depth Interval												
Validation Status												
Metals												
Aluminum	78000	3900	NS	NS	14100	15000	15900	13200	11800	13100	7940	
Antimony	31	6	14	NS	< 0.15 J	< 0.15 J	< 0.15 J	< 0.15 J	< 0.14	< 0.16 J	< 0.14	
Arsenic	19	19	20	NS	2.2 B	3.9	7.9	2.6	2.2	3.6	1.9 B	
Barium	16000	1300	700	NS	54.2	61.9	53.3	49.9	99.3	38	31.6	
Beryllium	16	0.5	2	NS	0.52	0.87	0.66	0.56	0.44	0.71	0.36	
Cadmium	78	1	39	NS	< 0.59	< 0.59	0.23 J	< 0.6	0.51 J	< 0.63	< 0.55	
Calcium	NS	NS	NS	NS	1170	1350	776	1220	1410	1460	1920	
Chromium	NS	NS	NS	NS	17.8	19.4	19.7	16.6	20.4	17.2	13.2	
Cobalt	1600	59	NS	NS	5.7 B	6.8	13	7.3	7.7	9.2	5.1 B	
Copper	3100	7300	600	NS	19.7	29	20.9	18.1	19.3	21.7	18.1	
Iron	NS	NS	NS	NS	14600 J	17300 J	28000 J	16600 J	19600	21200 J	15200	
Lead	400	59	400	NS	7.8	13	18	9.1	36.5	7.8	5.9	
Magnesium	NS	NS	NS	NS	2990	3400	4210	3350	4610	3510	2530	
Manganese	11000	42	NS	NS	156 J	199 J	932 J	201 J	284	246 J	601	
Mercury	23	0.1	14	NS	0.023 B	0.03 B	0.017 B	0.015 B	0.031 B	0.017 B	0.019 B	
Nickel	1600	31	250	NS	17.3	18	18.4	15.6	19.5	17.8	14.8	
Potassium	NS	NS	NS	NS	1590 J	1630 J	1090 J	1390 J	1000 B	1060 J	1110	
Selenium	390	7	63	NS	< 0.32	< 0.31	< 0.32	< 0.32	< 0.3	< 0.34	< 0.29	
Silver	390	1	110	NS	0.39 J	0.52 B	0.75	0.46 J	< 0.077	0.62 B	< 0.076	
Sodium	NS	NS	NS	NS	218 B	203 B	51.3 J	77 J	1960	165 B	545 B	
Thallium	5	3	2	NS	< 0.25	< 0.25	< 0.25	< 0.25	< 0.23	< 0.26	< 0.23	
Vanadium	78	NS	370	NS	23.2	39.5	35.3	29.1	31.1	33.4	20.2	
Zinc	23000	600	1500	NS	53.2	55.2	51.4	45.2	46.6	42.5	39.7	
Other												
Cyanide	1600	13	1100	NS	< 0.29	< 0.26	< 0.28	< 0.26	0.27	< 0.28	< 0.25	
Solids, Percent	NS	NS	NS	NS	82.5	84.8	84.4	83.5	90.4	82.6	90.7	

Results are reported in milligrams per kilogram (mg/kg).

Trip Blanks and Field Blanks reported in micrograms per liter (ug/l).

< Not detected.

NS No standard.

B Inorganic B: Result is between the detection limit and quantification limit.

J Estimated result.

PCB Polychlorinated biphenyls.

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Exceedances of NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)

Shaded Exceedances of NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)

Outlined Exceedances of NJ Residential Soil Criteria (NJAC 7:26D 5/99)

Underline Exceedances of NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-4SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-5B (6.0-6.5) 12/20/2011 6 - 6.5 Final	PE-5SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-6SW(9.0-9.5) 12/19/2011 9 - 9.5 Final	PE-7SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-8SW(9.0-9.5) 12/19/2011 9 - 9.5 Final
Validation Status										
VOCs										
1,1,1-Trichloroethane	290	0.2	210	50	< 0.00022	< 0.00022	< 0.00023	< 0.00023	< 0.00023	< 0.00023
1,1,2,2-Tetrachloroethane	1	0.005	34	1	< 0.00016	< 0.00017	< 0.00017	< 0.00017	< 0.00017	< 0.00017
1,1,2-Trichloroethane	2	0.01	22	1	< 0.00039	< 0.0004	< 0.00041	< 0.00041	< 0.00041	< 0.00041
1,1-Dichloroethane	8	0.2	570	10	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00021	< 0.00021
1,1-Dichloroethene	11	0.005	8	10	< 0.00055	< 0.00057	< 0.00057	< 0.00057	< 0.00058	< 0.00058
1,2,4-Trichlorobenzene	73	0.4	68	100	< 0.00031	< 0.00032	< 0.00032	< 0.00032	< 0.00032	< 0.00032
1,2-Dibromo-3-Chloropropane (DBCP)	0.08	0.005	NS	NS	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
1,2-Dibromoethane	0.008	0.005	NS	NS	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00023	< 0.00023
1,2-Dichlorobenzene	5300	11	5100	50	< 0.00025	< 0.00026	< 0.00026	< 0.00026	< 0.00026	< 0.00026
1,2-Dichloroethane	0.9	0.005	6	1	< 0.00016	< 0.00017	< 0.00017	< 0.00017	< 0.00017	< 0.00017
1,2-Dichloropropane	2	0.005	10	NS	< 0.00024	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025
1,3-Dichlorobenzene	5300	12	5100	100	< 0.00017	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
1,4-Dichlorobenzene	5	1	570	100	< 0.00015	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016
2-Butanone (MEK)	3100	0.6	1000	50	< 0.0039	< 0.004	< 0.0041	< 0.0041	< 0.0041	< 0.0041
2-Hexanone	NS	NS	NS	NS	< 0.0022	< 0.0023	< 0.0023	< 0.0023	< 0.0024	< 0.0024
4-methyl-2-pentanone (MIBK)	NS	NS	1000	50	< 0.0024	< 0.0024	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Acetone	70000	12	1000	100	< 0.006	0.0166	< 0.0062	< 0.0062	0.0236	< 0.0063
Benzene	2	0.005	3	1	< 0.00012	0.00047 J	< 0.00012	0.00019 J	0.00038 J	< 0.00013
Bromodichloromethane	1	0.005	11	1	< 0.0002	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021
Bromoform	81	0.02	86	1	< 0.00068	< 0.0007	< 0.00071	< 0.00071	< 0.00072	< 0.00072
Bromomethane	25	0.03	79	1	< 0.00036	< 0.00037	< 0.00037	< 0.00037	< 0.00037	< 0.00038
Carbon disulfide	7800	4	NS	NS	< 0.00018	< 0.00018	< 0.00018	< 0.00018	0.00043 J	< 0.00019
Carbon tetrachloride	0.6	0.005	2	1	< 0.00031	< 0.00032	< 0.00032	< 0.00032	< 0.00033	< 0.00033
Chlorobenzene	510	0.4	37	1	< 0.00029	< 0.0003	< 0.0003	< 0.0003	< 0.00031	< 0.00031
Chloroethane	220	NS	NS	NS	< 0.00037	< 0.00038	< 0.00038	< 0.00038	< 0.00039	< 0.00039
Chloroform	0.6	0.2	19	1	< 0.00044	< 0.00045	< 0.00045	< 0.00045	< 0.00046	< 0.00046
Chloromethane	4	NS	520	10	< 0.00056	< 0.00058	< 0.00058	< 0.00058	< 0.00059	< 0.00059
cis-1,2-Dichloroethene	230	0.2	79	1	< 0.00029	< 0.0003	< 0.0003	< 0.0003	< 0.00031	< 0.00031
cis-1,3-Dichloropropene	2	0.005	4	1	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014
Cyclohexane	NS	NS	NS	NS	< 0.00034	< 0.00035	< 0.00035	< 0.00035	< 0.00036	< 0.00036
Dibromochloromethane	3	0.005	110	1	< 0.00015	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016
Dichlorodifluoromethane	490	25	NS	NS	< 0.00029	< 0.0003	< 0.0003	< 0.0003	< 0.00031	< 0.00031
Ethylbenzene	7800	8	1000	100	0.00018 J	0.0145	0.00037 J	0.0052	0.105	0.0011
Freon 113	NS	NS	NS	NS	< 0.00065	< 0.00067	< 0.00067	< 0.00067	< 0.00068	< 0.00068
Isopropylbenzene	NS	NS	NS	NS	< 0.00012	0.0075	< 0.00013	0.0018 J	0.0676	< 0.00013
Methyl acetate	78000	14	NS	NS	< 0.002	< 0.0021	< 0.0021	< 0.0021	< 0.0021	< 0.0021
Methyl tert butyl ether	110	0.2	NS	NS	< 0.00016	< 0.00017	< 0.00017	< 0.00017	< 0.00017	< 0.00017
Methylcyclohexane	NS	NS	NS	NS	< 0.00022	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023
Methylene chloride	34	0.007	49	1	< 0.00021	< 0.00021	< 0.00022	< 0.00022	< 0.00022	< 0.00022
Styrene	90	2	23	100	< 0.00017	< 0.00017	< 0.00017	< 0.00017	< 0.00018	< 0.00018
Tetrachloroethene	2	0.005	4	1	< 0.00017	< 0.00018	< 0.00018	0.00072 J	< 0.00018	< 0.00018
Toluene	6300	4	1000	500	< 0.00034	0.00047 J	0.00075 J	< 0.00035	0.0016	0.0017
Trans-1,2-dichloroethene	300	0.4	1000	50	< 0.00038	0.0019 J	< 0.0004	0.0011 J	< 0.0004	0.0006 J
trans-1,3-Dichloropropene	2	0.005	4	1	< 0.0003	< 0.00031	< 0.00031	< 0.00031	< 0.00032	< 0.00032
Trichloroethene	7	0.007	23	1	< 0.00022	< 0.00023	< 0.00023	< 0.00023	< 0.00024	< 0.00024
Trichlorofluoromethane	23000	22	NS	NS	< 0.00044	< 0.00045	< 0.00045	< 0.00045	< 0.00046	< 0.00046
Vinyl Chloride	0.7	0.005	2	10	< 0.00042	< 0.00043	< 0.00043	< 0.00043	< 0.00044	< 0.00044
Xylenes	12000	12	410	67	0.00069 J	0.121	0.0018	0.0189	1.34	0.0064
Total TIC, Volatile	NS	NS	NS	NS	0	0	0	0	0.196 J	0

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-4SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-5B (6.0-6.5) 12/20/2011 6 - 6.5 Final	PE-5SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-6SW(9.0-9.5) 12/19/2011 9 - 9.5 Final	PE-7SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-8SW(9.0-9.5) 12/19/2011 9 - 9.5 Final
SVOCs										
1,1'-Biphenyl	3100	90	NS	NS	< 0.0038	< 0.0039	< 0.0037	< 0.0037	< 0.0037	< 0.0037
2,4,5-Trichlorophenol	6100	44	5600	50	< 0.038	< 0.039	< 0.037	< 0.037	< 0.037	< 0.037
2,4,6-Trichlorophenol	19	0.2	62	10	< 0.031	< 0.031	< 0.03	< 0.03	< 0.03	< 0.03
2,4-Dichlorophenol	180	0.2	170	10	< 0.053	< 0.054	< 0.052	< 0.051	< 0.051	< 0.051
2,4-Dimethylphenol	1200	0.7	1100	10	< 0.056	< 0.056	< 0.054	< 0.053	< 0.053	< 0.053
2,4-Dinitrophenol	120	0.3	110	10	< 0.04	< 0.041	< 0.039	< 0.039	< 0.038	< 0.039
2,4-Dinitrotoluene	0.7	NS	1	10	< 0.014	< 0.015	< 0.014	< 0.014	< 0.014	< 0.014
2,6-Dinitrotoluene	0.7	NS	1	10	< 0.013	< 0.013	< 0.012	< 0.012	< 0.012	< 0.012
2-Chloronaphthalene	NS	NS	NS	NS	< 0.01	< 0.01	< 0.01	< 0.0098	< 0.0098	< 0.0098
2-Chlorophenol	310	0.5	280	10	< 0.033	< 0.034	< 0.032	< 0.032	< 0.032	< 0.032
2-Methylnaphthalene	230	5	NS	NS	< 0.018	< 0.019	< 0.018	< 0.018	< 0.018	0.131
2-Methylphenol	310	NS	2800	NS	< 0.038	< 0.038	< 0.037	< 0.036	< 0.036	< 0.036
2-Nitroaniline	39	NS	NS	NS	< 0.015	< 0.015	< 0.014	< 0.014	< 0.014	< 0.014
2-Nitrophenol	NS	NS	NS	NS	< 0.035	< 0.036	< 0.034	< 0.033	< 0.033	< 0.033
3&4-Methylphenol	NS	NS	NS	NS	< 0.042	< 0.043	< 0.041	< 0.04	< 0.04	< 0.04
3,3'-Dichlorobenzidine	1	0.2	2	100	< 0.0084	< 0.0085	< 0.0082	< 0.008	< 0.008	< 0.008
3-Nitroaniline	NS	NS	NS	NS	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
4,6-Dinitro-2-methylphenol	6	0.3	NS	NS	< 0.04	< 0.041 R	< 0.039	< 0.039	< 0.038	< 0.039
4-Bromophenyl phenyl ether	NS	NS	NS	NS	< 0.012	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011
4-Chloro-3-Methylphenol	NS	NS	10000	100	< 0.033	< 0.033	< 0.032	< 0.032	< 0.032	< 0.032
4-Chloroaniline	NS	NS	230	NS	< 0.011	< 0.011	< 0.01	< 0.01	< 0.01	< 0.01
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	< 0.01	< 0.01	< 0.0097	< 0.0095	< 0.0095	< 0.0095
4-Nitroaniline	NS	NS	NS	NS	< 0.013	< 0.013	< 0.013	< 0.012	< 0.012	< 0.012
4-Nitrophenol	NS	NS	NS	NS	< 0.056	< 0.057	< 0.054	< 0.053	< 0.053	< 0.053
Acenaphthene	3400	74	3400	100	< 0.0096	< 0.0097	< 0.0093	< 0.0092	< 0.0091	< 0.0092
Acenaphthylene	NS	NS	NS	NS	< 0.011	< 0.011	< 0.01	< 0.01	< 0.01	< 0.01
Acetophenone	2	2	NS	NS	< 0.0058	< 0.0059	< 0.0057	< 0.0056	< 0.0056	< 0.0056
Anthracene	17000	1500	10000	100	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011
Atrazine	210	0.2	NS	NS	< 0.0065	< 0.0066	< 0.0063	< 0.0062	< 0.0062	< 0.0062
Benzaldehyde	6100	NS	NS	NS	< 0.0076	< 0.0077	< 0.0074	< 0.0073	< 0.0073	< 0.0073
Benzo(a)anthracene	0.6	0.5	0.9	500	< 0.011	< 0.011	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	0.2	0.2	0.66	100	< 0.01	< 0.01	< 0.0098	< 0.0096	< 0.0096	< 0.0096
Benzo(b)fluoranthene	0.6	2	0.9	50	< 0.011	< 0.011 J	< 0.011	< 0.011	< 0.011	< 0.011
Benzo(g,h,i)perylene	380000	NS	NS	NS	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012
Benzo(k)fluoranthene	6	16	0.9	500	< 0.012	< 0.013	< 0.012	< 0.012	< 0.012	< 0.012
Benzyl butyl phthalate	1200	150	1100	100	< 0.019	< 0.019	< 0.019	< 0.018	< 0.018	< 0.018
bis(2-Chloroethoxy)methane	NS	NS	NS	NS	< 0.013	< 0.014	< 0.013	< 0.013	< 0.013	< 0.013
bis(2-Chloroethyl)ether	0.4	0.2	0.66	10	< 0.01	< 0.01	< 0.0097	< 0.0095	< 0.0095	< 0.0095
bis(2-Chloroisopropyl)ether	23	3	2300	10	< 0.0098	< 0.0099	< 0.0095	< 0.0094	< 0.0094	< 0.0094
bis(2-Ethylhexyl)phthalate	35	790	49	100	< 0.029	< 0.03	< 0.028	< 0.028	0.231	0.159
Caprolactam	31000	8	NS	NS	< 0.01	< 0.011	< 0.01	< 0.0099	< 0.0099	< 0.0099
Carbazole	24	NS	NS	NS	< 0.015	< 0.016	< 0.015	< 0.015	< 0.015	< 0.015
Chrysene	62	52	9	500	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Dibenzo(a,h)anthracene	0.2	0.5	0.66	100	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Dibenzofuran	NS	NS	NS	NS	< 0.0098	< 0.0099	< 0.0095	< 0.0094	< 0.0094	< 0.0094
Diethyl phthalate	49000	57	10000	50	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Dimethyl phthalate	NS	NS	10000	50	< 0.012	0.0633 J	< 0.011	0.0444 J	< 0.011	0.059 J
di-n-butyl phthalate	6100	620	5700	100	< 0.0073	< 0.0074	< 0.0071	< 0.007	< 0.007	< 0.007
di-n-octylphthalate	2400	3300	1100	100	< 0.016	< 0.016	< 0.016	< 0.015	< 0.015	< 0.015
Fluoranthene	2300	840	2300	100	< 0.015	< 0.015	< 0.014	< 0.014	< 0.014	< 0.014
Fluorene	2300	110	2300	100	< 0.011	< 0.011	< 0.011	< 0.01	< 0.01	< 0.01

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-4SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-5B (6.0-6.5) 12/20/2011 6 - 6.5 Final	PE-5SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-6SW(9.0-9.5) 12/19/2011 9 - 9.5 Final	PE-7SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-8SW(9.0-9.5) 12/19/2011 9 - 9.5 Final
Sample Date										
Depth Interval										
Validation Status										
Hexachlorobenzene	0.3	0.2	0.66	100	< 0.011	< 0.011	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	6	0.6	1	100	< 0.0092	< 0.0093	< 0.0089	< 0.0088	< 0.0088	< 0.0088
Hexachlorocyclopentadiene	45	210	400	100	< 0.034	< 0.034	< 0.033	< 0.032	< 0.032	< 0.032
Hexachloroethane	35	0.2	6	100	< 0.0092	< 0.0093	< 0.0089	< 0.0088	< 0.0088	< 0.0088
Indeno(1,2,3-cd)pyrene	0.6	5	0.9	500	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011
Isophrone	510	0.2	1100	50	< 0.0089	< 0.009	< 0.0086	< 0.0085	< 0.0085	< 0.0085
Naphthalene	6	16	230	100	< 0.009	< 0.0091	< 0.0088	< 0.0086	0.0847	0.158
Nitrobenzene	31	0.2	28	50	< 0.0096	< 0.0097	< 0.0093	< 0.0091	< 0.0091	< 0.0091
N-Nitroso-di-n-Propylamine	0.2	0.2	0.66	10	< 0.0081	< 0.0082	< 0.0078	< 0.0077	< 0.0077	< 0.0077
N-Nitrosodiphenylamine	99	0.2	140	1000	< 0.02	< 0.02	< 0.019	< 0.019	< 0.019	< 0.019
Pentachlorophenol	3	0.3	6	100	< 0.057	< 0.057	< 0.055	< 0.054	< 0.054	< 0.054
Phanthrene	NS	NS	NS	NS	< 0.015	< 0.015	< 0.015	< 0.014	< 0.014	< 0.014
Phenol	18000	5	10000	50	< 0.035	< 0.035	< 0.034	< 0.033	< 0.033	< 0.033
Pyrene	1700	550	1700	100	< 0.013	< 0.013	< 0.012	< 0.012	< 0.012	< 0.012
Total TIC, Semi-Volatile	NS	NS	NS	NS	0	0.18 J	0	0	1.81 J	1.71 J
Pesticides										
4,4-DDD	3	3	3	50	< 0.00035	< 0.00035	< 0.00034	< 0.00033	< 0.00033	< 0.00033
4,4-DDE	2	12	2	50	< 0.0004	< 0.00041	< 0.00039	< 0.00038	< 0.00038	< 0.00038
4,4-DDT	2	7	2	500	< 0.0005	< 0.00051	< 0.00048	< 0.00048	< 0.00048	< 0.00048
Aldrin	0.04	0.1	0.04	50	< 0.00034	< 0.00034	< 0.00033	< 0.00032	< 0.00032	< 0.00032
alpha-BHC	0.1	0.002	NS	NS	< 0.00051	< 0.00052	< 0.0005	< 0.00049	< 0.00049	< 0.00049
alpha-Chlordane	0.2	0.03	NS	NS	< 0.00044	< 0.00045	< 0.00043	< 0.00042	< 0.00042	< 0.00042
beta-BHC	0.4	0.002	NS	NS	< 0.00048	< 0.00048	< 0.00046	< 0.00046	< 0.00046	< 0.00046
delta-BHC	NS	NS	NS	NS	< 0.0004	< 0.0004 J	< 0.00039 J	< 0.00038 J	< 0.00038 J	< 0.00038 J
Dieldrin	0.04	0.003	0.042	50	< 0.00053	< 0.00053	< 0.00051	< 0.0005	< 0.0005	< 0.0005
Endosulfan I (alpha)	470	2	NS	NS	< 0.00033	< 0.00033	< 0.00032	< 0.00031	< 0.00031	< 0.00031
Endosulfan II (beta)	470	2	NS	NS	< 0.00045	< 0.00045	< 0.00044	< 0.00043	< 0.00043	< 0.00043
Endosulfan sulfate	470	1	NS	NS	< 0.00062	< 0.00062	< 0.0006	< 0.00059	< 0.00059	< 0.00059
Endrin	23	0.6	17	50	< 0.00035	< 0.00035	< 0.00034	< 0.00033	< 0.00033	< 0.00033
Endrin Aldehyde	NS	NS	NS	NS	< 0.00065	< 0.00065	< 0.00063	< 0.00062	< 0.00062	< 0.00062
Endrin ketone	NS	NS	NS	NS	< 0.00044	< 0.00045	< 0.00043	< 0.00042	< 0.00042	< 0.00042
gamma-Chlordane	0.2	0.03	NS	NS	< 0.00035	< 0.00035	< 0.00034	< 0.00033	< 0.00033	< 0.00033
Heptachlor	0.1	0.3	0.15	50	< 0.00042	< 0.00042	< 0.00041	< 0.0004	< 0.0004	< 0.0004
Heptachlor epoxide	0.07	0.009	NS	NS	< 0.00034	< 0.00034	< 0.00033	< 0.00032	< 0.00032	< 0.00032
Lindane	0.4	0.002	0.52	50	< 0.00031	< 0.00031	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Methoxychlor	390	100	280	50	< 0.00048	< 0.00049	< 0.00047	< 0.00046	< 0.00046	< 0.00046
Toxaphene	0.6	0.2	0.1	50	< 0.0086	< 0.0087	< 0.0083	< 0.0082	< 0.0082	< 0.0082
PCBs										
PCB 1016	0.2	0.2	0.49	50	< 0.0089	< 0.009	< 0.0086	< 0.0084	< 0.0084	< 0.0084
PCB 1221	0.2	0.2	0.49	50	< 0.021	< 0.021	< 0.02	< 0.02	< 0.02	< 0.02
PCB 1232	0.2	0.2	0.49	50	< 0.017	< 0.017	< 0.017	< 0.016	< 0.016	< 0.016
PCB 1242	0.2	0.2	0.49	50	< 0.011	< 0.011	< 0.011	< 0.01	< 0.01	< 0.01
PCB 1248	0.2	0.2	0.49	50	< 0.01	< 0.01	< 0.01	< 0.0099	< 0.0099	< 0.0099
PCB 1254	0.2	0.2	0.49	50	< 0.016	< 0.016	< 0.015	< 0.015	< 0.015	< 0.015
PCB 1260	0.2	0.2	0.49	50	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Total PCBs	0.2	0.2	0.49	50	0	0	0	0	0	0

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-4SW(6.5-7.0) 12/16/2011 6.5 - 7 Final	PE-5B (6.0-6.5) 12/20/2011 6 - 6.5 Final	PE-5SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-6SW(9.0-9.5) 12/19/2011 9 - 9.5 Final	PE-7SW(5.5-6.0) 12/19/2011 5.5 - 6 Final	PE-8SW(9.0-9.5) 12/19/2011 9 - 9.5 Final
Metals										
Aluminum	78000	3900	NS	NS	12100	7430	8390	7150	8590	11900
Antimony	31	6	14	NS	< 0.15 J	< 0.13	< 0.14	< 0.14	< 0.14	< 0.14
Arsenic	19	19	20	NS	2.1 B	2.2	1.7 B	3	1.9 B	3.8
Barium	16000	1300	700	NS	49.3	28.8	26.2	27.2	28.2	41.4
Beryllium	16	0.5	2	NS	0.37	0.35 J	0.33	0.34	0.25	0.49
Cadmium	78	1	39	NS	< 0.59	< 0.52	< 0.56	< 0.57	< 0.57	< 0.55
Calcium	NS	NS	NS	NS	1560	1490	691	562 B	311 B	1040
Chromium	NS	NS	NS	NS	17.1	13.6	13.2	9.5	16.4	16.8
Cobalt	1600	59	NS	NS	4.8 B	5.4	5.5 B	6.2	3.5 B	8.5
Copper	3100	7300	600	NS	11.3	17.8	12.9	13.9	7.8	22.6
Iron	NS	NS	NS	NS	13700 J	18100	13800	16100	10500	21200
Lead	400	59	400	NS	5.4	12.7	5.2	5.7	4.8	7.2
Magnesium	NS	NS	NS	NS	2730	2580	2730	2460	2160	3650
Manganese	11000	42	NS	NS	158 J	1100	153	165	79	485
Mercury	23	0.1	14	NS	0.021 B	< 0.015	0.014 B	0.013 B	0.015 B	0.017 B
Nickel	1600	31	250	NS	14.5	14	12.2	12.9	12.7	21.2
Potassium	NS	NS	NS	NS	1380 J	762 B	907 B	705 B	867 B	1170
Selenium	390	7	63	NS	< 0.32	< 0.28	< 0.3	< 0.3	< 0.31	< 0.3
Silver	390	1	110	NS	0.41 J	< 0.52	< 0.077	< 0.079	< 0.079	< 0.076
Sodium	NS	NS	NS	NS	63.4 J	155 B	68.7 B	38.3 B	462 B	144 B
Thallium	5	3	2	NS	< 0.25	< 0.43	< 0.23	< 0.24	< 0.24	< 0.23
Vanadium	78	NS	370	NS	17.3	24.7	16.4	14.7	12.8	20.3
Zinc	23000	600	1500	NS	46.8	31.6	31.7	33.2	26.3	48.5
Other										
Cyanide	1600	13	1100	NS	< 0.25	< 0.27	< 0.24	< 0.25	< 0.24	< 0.25
Solids, Percent	NS	NS	NS	NS	86.3	85.3	89	90.5	90.6	90.5

Results are reported in milligrams per kilogram (mg/kg).

Trip Blanks and Field Blanks reported in micrograms per liter (ug/l).

< Not detected.

NS No standard.

B Inorganic B: Result is between the detection limit and quantification limit.

J Estimated result.

PCB Polychlorinated biphenyls.

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Exceedances of NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)

Shaded Exceedances of NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)

Outlined Exceedances of NJ Residential Soil Criteria (NJAC 7:26D 5/99)

Underline Exceedances of NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-9SW (3.5-4.0) 12/20/2011 3.5 - 4 Final	PE-10SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	PE-11SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	FB(121611) 12/16/2011	FB(121911) 12/19/2011	FB(122011) 12/20/2011	TRIP BLANK(121611) 12/16/2011
Sample Date											
Depth Interval											
Validation Status											
VOCs											
1,1,1-Trichloroethane	290	0.2	210	50	< 0.00021	< 0.00026	< 0.013	< 0.24	< 0.24	< 0.24	< 0.24
1,1,2,2-Tetrachloroethane	1	0.005	34	1	< 0.00016	< 0.00019	< 0.0095	< 0.2	< 0.2	< 0.2	< 0.2
1,1,2-Trichloroethane	2	0.01	22	1	< 0.00039	< 0.00046	< 0.023	< 0.23	< 0.23	< 0.23	< 0.23
1,1-Dichloroethane	8	0.2	570	10	< 0.00019	< 0.00023	< 0.012	< 0.19	< 0.19	< 0.19	< 0.19
1,1-Dichloroethene	11	0.005	8	10	< 0.00055	< 0.00065	< 0.032	< 0.28	< 0.28	< 0.28	< 0.28
1,2,4-Trichlorobenzene	73	0.4	68	100	< 0.0003	< 0.00036	< 0.018	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dibromo-3-Chloropropane (DBCP)	0.08	0.005	NS	NS	< 0.0013	< 0.0016	< 0.08	< 1.3	< 1.3	< 1.3	< 1.3
1,2-Dibromoethane	0.008	0.005	NS	NS	< 0.00021	< 0.00025	< 0.013	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dichlorobenzene	5300	11	5100	50	< 0.00025	< 0.0003	< 0.015	< 0.18	< 0.18	< 0.18	< 0.18
1,2-Dichloroethane	0.9	0.005	6	1	< 0.00016	< 0.00019	< 0.0096	< 0.18	< 0.18	< 0.18	< 0.18
1,2-Dichloropropane	2	0.005	10	NS	< 0.00024	< 0.00028	< 0.014	< 0.22	< 0.22	< 0.22	< 0.22
1,3-Dichlorobenzene	5300	12	5100	100	< 0.00017	< 0.0002	< 0.01	< 0.29	< 0.29	< 0.29	< 0.29
1,4-Dichlorobenzene	5	1	570	100	< 0.00015	< 0.00018	< 0.009	< 0.26	< 0.26	< 0.26	< 0.26
2-Butanone (MEK)	3100	0.6	1000	50	< 0.0039	< 0.0046	< 0.23	< 2.9	< 2.9	< 2.9	< 2.9
2-Hexanone	NS	NS	NS	NS	< 0.0022	< 0.0026	< 0.13	< 3	< 3	< 3	< 3
4-methyl-2-pentanone (MIBK)	NS	NS	1000	50	< 0.0023	< 0.0028	< 0.14	< 1.2	< 1.2	< 1.2	< 1.2
Acetone	70000	12	1000	100	0.0206	0.0128	< 0.35	< 7.6	< 7.6	< 7.6	< 7.6
Benzene	2	0.005	3	1	0.00043 J	< 0.00014	< 0.007	< 0.22	< 0.22	< 0.22	< 0.22
Bromodichloromethane	1	0.005	11	1	< 0.0002	< 0.00024	< 0.012	< 0.23	< 0.23	< 0.23	< 0.23
Bromoform	81	0.02	86	1	< 0.00067	< 0.0008	< 0.04	< 0.24	< 0.24	< 0.24	< 0.24
Bromomethane	25	0.03	79	1	< 0.00035	< 0.00042	< 0.021	< 0.31	< 0.31	< 0.31	< 0.31
Carbon disulfide	7800	4	NS	NS	< 0.00017	< 0.00021	< 0.01	< 0.18	< 0.18	< 0.18	< 0.18
Carbon tetrachloride	0.6	0.005	2	1	< 0.00031	< 0.00037	< 0.018	< 0.19	< 0.19	< 0.19	< 0.19
Chlorobenzene	510	0.4	37	1	< 0.00029	< 0.00034	< 0.017	< 0.22	< 0.22	< 0.22	< 0.22
Chloroethane	220	NS	NS	NS	< 0.00036	< 0.00043	< 0.022	< 0.37	< 0.37	< 0.37	< 0.37
Chloroform	0.6	0.2	19	1	< 0.00043	< 0.00051	< 0.026	< 0.21	< 0.21	< 0.21	< 0.21
Chloromethane	4	NS	520	10	< 0.00056	< 0.00067	< 0.033	< 0.22	< 0.22	< 0.22	< 0.22
cis-1,2-Dichloroethene	230	0.2	79	1	0.00029 J	< 0.00034	< 0.017	< 0.22	< 0.22	< 0.22	< 0.22
cis-1,3-Dichloropropene	2	0.005	4	1	< 0.00014	< 0.00016	< 0.008	< 0.22	< 0.22	< 0.22	< 0.22
Cyclohexane	NS	NS	NS	NS	< 0.00034	< 0.0004	< 0.02	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	3	0.005	110	1	< 0.00015	< 0.00018	< 0.0089	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorodifluoromethane	490	25	NS	NS	< 0.00029	< 0.00034	< 0.017	< 0.31	< 0.31	< 0.31	< 0.31
Ethylbenzene	7800	8	1000	100	0.0021	0.00044 J	0.92	< 0.21	< 0.21	< 0.21	< 0.21
Freon 113	NS	NS	NS	NS	< 0.00064	< 0.00076	< 0.038	< 0.49	< 0.49	< 0.49	< 0.49
Isopropylbenzene	NS	NS	NS	NS	0.001 J	< 0.00015	0.0493 J	< 0.19	< 0.19	< 0.19	< 0.19
Methyl acetate	78000	14	NS	NS	< 0.002	< 0.0024	< 0.12	< 2.9	< 2.9	< 2.9	< 2.9
Methyl tert butyl ether	110	0.2	NS	NS	< 0.00016	< 0.00019	< 0.0095	< 0.18	< 0.18	< 0.18	< 0.18
Methylcyclohexane	NS	NS	NS	NS	< 0.00022	< 0.00026	< 0.013	< 0.18	< 0.18	< 0.18	< 0.18
Methylene chloride	34	0.007	49	1	< 0.00021	< 0.00025	0.0473 J	< 0.2	< 0.2	< 0.2	< 0.2
Styrene	90	2	23	100	< 0.00017	< 0.0002	< 0.0098	< 0.23	< 0.23	< 0.23	< 0.23
Tetrachloroethene	2	0.005	4	1	< 0.00017	< 0.0002	0.177 J	< 0.32	< 0.32	< 0.32	< 0.32
Toluene	6300	4	1000	500	0.0013	< 0.0004	0.501	< 0.15	< 0.15	< 0.15	< 0.15
Trans-1,2-dichloroethene	300	0.4	1000	50	0.00091 J	< 0.00045	< 0.022	< 0.31	< 0.31	< 0.31	< 0.31
trans-1,3-Dichloropropene	2	0.005	4	1	< 0.0003	< 0.00036	< 0.018	< 0.19	< 0.19	< 0.19	< 0.19
Trichloroethene	7	0.007	23	1	< 0.00022	< 0.00026	0.0421 J	< 0.21	< 0.21	< 0.21	< 0.21
Trichlorofluoromethane	23000	22	NS	NS	< 0.00043	< 0.00051	< 0.025	< 0.35	< 0.35	< 0.35	< 0.35
Vinyl Chloride	0.7	0.005	2	10	< 0.00041	< 0.00049	< 0.024	< 0.27	< 0.27	< 0.27	< 0.27
Xylenes	12000	12	410	67	0.0048	0.0022	4.97	< 0.17	< 0.17	< 0.17	< 0.17
Total TIC, Volatile	NS	NS	NS	NS	0	0	1.74 J	NA	NA	NA	NA

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-9SW (3.5-4.0) 12/20/2011 3.5 - 4 Final	PE-10SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	PE-11SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	FB(121611) 12/16/2011 Final	FB(121911) 12/19/2011 Final	FB(122011) 12/20/2011 Final	TRIP BLANK(121611) 12/16/2011 Final
Sample Date											
Depth Interval											
Validation Status											
SVOCs											
1,1'-Biphenyl	3100	90	NS	NS	< 0.0037	< 0.004	< 0.0038	< 0.32	< 0.3	< 0.3	NA
2,4,5-Trichlorophenol	6100	44	5600	50	< 0.037	< 0.04	< 0.038	< 1.6	< 1.6	< 1.6	NA
2,4,6-Trichlorophenol	19	0.2	62	10	< 0.03	< 0.033	< 0.031	< 1.4	< 1.3	< 1.3	NA
2,4-Dichlorophenol	180	0.2	170	10	< 0.051	< 0.056	< 0.053	< 1.2	< 1.2	< 1.2	NA
2,4-Dimethylphenol	1200	0.7	1100	10	< 0.053	< 0.058	< 0.055	< 1.6	< 1.5	< 1.5	NA
2,4-Dinitrophenol	120	0.3	110	10	< 0.039	< 0.042	< 0.04	< 17	< 17	< 17	NA
2,4-Dinitrotoluene	0.7	NS	1	10	< 0.014	< 0.015	< 0.014	< 0.45	< 0.43	< 0.43	NA
2,6-Dinitrotoluene	0.7	NS	1	10	< 0.012	< 0.013	< 0.013	< 0.49	< 0.46	< 0.46	NA
2-Chloronaphthalene	NS	NS	NS	NS	< 0.0098	< 0.011	< 0.01	< 0.31	< 0.3	< 0.3	NA
2-Chlorophenol	310	0.5	280	10	< 0.032	< 0.035	< 0.033	< 1	< 0.97	< 0.97	NA
2-Methylnaphthalene	230	5	NS	NS	< 0.018	< 0.019	0.122	< 0.4	< 0.38	< 0.38	NA
2-Methylphenol	310	NS	2800	NS	< 0.036	< 0.04	< 0.038	< 1.1	< 1	< 1	NA
2-Nitroaniline	39	NS	NS	NS	< 0.014	< 0.015	< 0.015	< 1.2	< 1.1	< 1.1	NA
2-Nitrophenol	NS	NS	NS	NS	< 0.034	< 0.037	< 0.035	< 1.6	< 1.5	< 1.5	NA
3&4-Methylphenol	NS	NS	NS	NS	< 0.04	< 0.044	< 0.042	< 0.97	< 0.93	< 0.93	NA
3,3'-Dichlorobenzidine	1	0.2	2	100	< 0.008	< 0.0088	< 0.0084	< 0.38	< 0.36	< 0.36	NA
3-Nitroaniline	NS	NS	NS	NS	< 0.013	< 0.014	< 0.013	< 1.3	< 1.3	< 1.3	NA
4,6-Dinitro-2-methylphenol	6	0.3	NS	NS	< 0.039 R	< 0.042 R	< 0.04 R	< 1	< 0.99	< 0.99	NA
4-Bromophenyl phenyl ether	NS	NS	NS	NS	< 0.011	< 0.013	< 0.012	< 0.38	< 0.36	< 0.36	NA
4-Chloro-3-Methylphenol	NS	NS	10000	100	< 0.032	< 0.035	< 0.033	< 1.9	< 1.8	< 1.8	NA
4-Chloroaniline	NS	NS	230	NS	< 0.01	< 0.011	< 0.011	< 0.56	< 0.53	< 0.53	NA
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	< 0.0095	< 0.01	< 0.0099	< 0.33	< 0.31	< 0.31	NA
4-Nitroaniline	NS	NS	NS	NS	< 0.012	< 0.014	< 0.013	< 1.7	< 1.7	< 1.7	NA
4-Nitrophenol	NS	NS	NS	NS	< 0.053	< 0.059	< 0.056	< 5.5	< 5.2	< 5.2	NA
Acenaphthene	3400	74	3400	100	< 0.0092	< 0.01	< 0.0096	< 0.28	< 0.26	< 0.26	NA
Acenaphthylene	NS	NS	NS	NS	< 0.01	< 0.011	< 0.011	< 0.24	< 0.23	< 0.23	NA
Acetophenone	2	2	NS	NS	< 0.0056	< 0.0061	< 0.0058	< 0.3	< 0.29	< 0.29	NA
Anthracene	17000	1500	10000	100	< 0.011	< 0.012	< 0.012	< 0.3	< 0.29	< 0.29	NA
Atrazine	210	0.2	NS	NS	< 0.0062	< 0.0068	< 0.0065	< 0.51	< 0.49	< 0.49	NA
Benzaldehyde	6100	NS	NS	NS	< 0.0073	< 0.008	< 0.0076	< 3.4	< 3.3	< 3.3	NA
Benzo(a)anthracene	0.6	0.5	0.9	500	< 0.01	< 0.011	0.0251 J	< 0.24	< 0.23	< 0.23	NA
Benzo(a)pyrene	0.2	0.2	0.66	100	< 0.0096	< 0.011	0.0189 J	< 0.24	< 0.23	< 0.23	NA
Benzo(b)fluoranthene	0.6	2	0.9	50	< 0.011 J	< 0.012 J	< 0.011 J	< 0.48	< 0.46	< 0.46 J	NA
Benzo(g,h,i)perylene	380000	NS	NS	NS	< 0.012	< 0.013	< 0.012	< 0.34	< 0.32	< 0.32	NA
Benzo(k)fluoranthene	6	16	0.9	500	< 0.012	< 0.013	< 0.012	< 0.54	< 0.51	< 0.51	NA
Benzyl butyl phthalate	1200	150	1100	100	< 0.018	< 0.02	< 0.019	< 0.3	< 0.29	< 0.29	NA
bis(2-Chloroethoxy)methane	NS	NS	NS	NS	< 0.013	< 0.014	< 0.013	< 0.32	< 0.31	< 0.31	NA
bis(2-Chloroethyl)ether	0.4	0.2	0.66	10	< 0.0095	< 0.01	< 0.0099	< 0.32	< 0.31	< 0.31	NA
bis(2-Chloroisopropyl)ether	23	3	2300	10	< 0.0094	< 0.01	< 0.0098	< 0.48	< 0.45	< 0.45	NA
bis(2-Ethylhexyl)phthalate	35	790	49	100	< 0.028	< 0.031	6.69	< 0.62	< 0.59	< 0.59	NA
Caprolactam	31000	8	NS	NS	< 0.01	< 0.011	< 0.01	< 0.73	< 0.69	< 0.69	NA
Carbazole	24	NS	NS	NS	< 0.015	< 0.016	< 0.015	< 0.38	< 0.36	< 0.36	NA
Chrysene	62	52	9	500	< 0.011	< 0.012	0.0239 J	< 0.3	< 0.29	< 0.29	NA
Dibenzo(a,h)anthracene	0.2	0.5	0.66	100	< 0.011	< 0.012	< 0.011	< 0.4	< 0.38	< 0.38	NA
Dibenzofuran	NS	NS	NS	NS	< 0.0094	< 0.01	< 0.0098	< 0.28	< 0.27	< 0.27	NA
Diethyl phthalate	49000	57	10000	50	< 0.011	< 0.012	< 0.011	< 0.34	< 0.33	< 0.33	NA
Dimethyl phthalate	NS	NS	10000	50	< 0.011	0.114	0.073	< 0.3	< 0.28	< 0.28	NA
di-n-butyl phthalate	6100	620	5700	100	< 0.007	< 0.0077	< 0.0073	< 0.58	< 0.56	< 0.56	NA
di-n-octylphthalate	2400	3300	1100	100	< 0.015	< 0.017	< 0.016	< 0.32	< 0.31	< 0.31	NA
Fluoranthene	2300	840	2300	100	< 0.014	< 0.015	0.0356	< 0.33	< 0.32	< 0.32	NA
Fluorene	2300	110	2300	100	< 0.01	< 0.011	0.0287 J	< 0.29	< 0.28	< 0.28	NA

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-9SW (3.5-4.0) 12/20/2011 3.5 - 4 Final	PE-10SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	PE-11SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	FB(121611) 12/16/2011	FB(121911) 12/19/2011	FB(122011) 12/20/2011	TRIP BLANK(121611) 12/16/2011
Sample Date											
Depth Interval											
Validation Status											
Hexachlorobenzene	0.3	0.2	0.66	100	< 0.01	< 0.011	< 0.011	< 0.36	< 0.34	< 0.34	NA
Hexachlorobutadiene	6	0.6	1	100	< 0.0088	< 0.0097	< 0.0092	< 0.54	< 0.51	< 0.51	NA
Hexachlorocyclopentadiene	45	210	400	100	< 0.032	< 0.035	< 0.034	< 7.5	< 7.1	< 7.1	NA
Hexachloroethane	35	0.2	6	100	< 0.0088	< 0.0097	< 0.0092	< 0.58	< 0.55	< 0.55	NA
Indeno(1,2,3-cd)pyrene	0.6	5	0.9	500	< 0.011	< 0.012	< 0.011	< 0.39	< 0.37	< 0.37	NA
Isophrone	510	0.2	1100	50	< 0.0085	< 0.0093	< 0.0089	< 0.29	< 0.27	< 0.27	NA
Naphthalene	6	16	230	100	< 0.0086	< 0.0095	0.244	< 0.27	< 0.26	< 0.26	NA
Nitrobenzene	31	0.2	28	50	< 0.0091	< 0.01	< 0.0095	< 0.44	< 0.42	< 0.42	NA
N-Nitroso-di-n-Propylamine	0.2	0.2	0.66	10	< 0.0077	< 0.0085	< 0.0081	< 0.32	< 0.3	< 0.3	NA
N-Nitrosodiphenylamine	99	0.2	140	1000	< 0.019	< 0.021	< 0.02	< 0.32	< 0.31	< 0.31	NA
Pentachlorophenol	3	0.3	6	100	< 0.054	< 0.059	< 0.056	< 1.5	< 1.4	< 1.4	NA
Phanthrene	NS	NS	NS	NS	< 0.014	< 0.016	0.0995	< 0.31	< 0.29	< 0.29	NA
Phenol	18000	5	10000	50	< 0.033	< 0.036	< 0.035	< 1.3	< 1.3	< 1.3	NA
Pyrene	1700	550	1700	100	< 0.012	< 0.013	0.0347	< 0.28	< 0.27	< 0.27	NA
Total TIC, Semi-Volatile	NS	NS	NS	NS	0	0.26 J	7.9 J	NA	NA	NA	NA
Pesticides											
4,4-DDD	3	3	3	50	< 0.00033	< 0.00037	< 0.00035	< 0.0038	< 0.0038	< 0.0036	NA
4,4-DDE	2	12	2	50	< 0.00038	< 0.00042	0.0014	< 0.0031	< 0.0031	< 0.003	NA
4,4-DDT	2	7	2	500	< 0.00048	< 0.00052	< 0.0005	< 0.0062	< 0.0062	< 0.006	NA
Aldrin	0.04	0.1	0.04	50	< 0.00032	< 0.00036	< 0.00034	< 0.098	< 0.098	< 0.095	NA
alpha-BHC	0.1	0.002	NS	NS	< 0.00049	< 0.00054	< 0.00051	< 0.041	< 0.041	< 0.004	NA
alpha-Chlordane	0.2	0.03	NS	NS	< 0.00042	< 0.00047	< 0.00044	< 0.052	< 0.052	< 0.005	NA
beta-BHC	0.4	0.002	NS	NS	< 0.00046	< 0.0005	< 0.00048	< 0.0039	< 0.0039	< 0.0038	NA
delta-BHC	NS	NS	NS	NS	< 0.00038 J	< 0.00042 J	< 0.0004 J	< 0.0064 J	< 0.0064 J	< 0.0062 J	NA
Dieldrin	0.04	0.003	0.042	50	< 0.0005	< 0.00055	< 0.00053	< 0.0034	< 0.0034	< 0.0033	NA
Endosulfan I (alpha)	470	2	NS	NS	< 0.00031	< 0.00035	< 0.00033	< 0.0032	< 0.0032	< 0.003	NA
Endosulfan II (beta)	470	2	NS	NS	< 0.00043	< 0.00047	< 0.00045	< 0.0029	< 0.0029	< 0.0028	NA
Endosulfan sulfate	470	1	NS	NS	< 0.00059	< 0.00065	< 0.00061	< 0.0067	< 0.0067	< 0.0064	NA
Endrin	23	0.6	17	50	< 0.00033	< 0.00037	< 0.00035	< 0.0066	< 0.0066	< 0.0064	NA
Endrin Aldehyde	NS	NS	NS	NS	< 0.00062	< 0.00068	< 0.00064	< 0.003	< 0.003	< 0.0029	NA
Endrin ketone	NS	NS	NS	NS	< 0.00042	< 0.00046	< 0.00044	< 0.0043	< 0.0043	< 0.0041	NA
gamma-Chlordane	0.2	0.03	NS	NS	< 0.00033	< 0.00037	< 0.00035	< 0.0024	< 0.0024	< 0.0023	NA
Heptachlor	0.1	0.3	0.15	50	< 0.0004	< 0.00044	< 0.00042	< 0.0087	< 0.0087	< 0.0084	NA
Heptachlor epoxide	0.07	0.009	NS	NS	< 0.00032	< 0.00035	< 0.00033	< 0.004	< 0.004	< 0.0038	NA
Lindane	0.4	0.002	0.52	50	< 0.0003	< 0.00033	< 0.00031	< 0.0043	< 0.0043	< 0.0041	NA
Methoxychlor	390	100	280	50	< 0.00046	< 0.0005	< 0.00048	< 0.0085	< 0.0085	< 0.0082	NA
Toxaphene	0.6	0.2	0.1	50	< 0.0082	< 0.009	< 0.0086	< 0.15	< 0.15	< 0.15	NA
PCBs											
PCB 1016	0.2	0.2	0.49	50	< 0.0085	< 0.0093	< 0.0088	< 0.13	< 0.13	< 0.13	NA
PCB 1221	0.2	0.2	0.49	50	< 0.02	< 0.022	< 0.02	< 0.28	< 0.28	< 0.27	NA
PCB 1232	0.2	0.2	0.49	50	< 0.016	< 0.018	< 0.017	< 0.4	< 0.4	< 0.39	NA
PCB 1242	0.2	0.2	0.49	50	< 0.01	< 0.011	< 0.011	< 0.09	< 0.09	< 0.086	NA
PCB 1248	0.2	0.2	0.49	50	< 0.0099	< 0.011	< 0.01	< 0.15	< 0.15	< 0.15	NA
PCB 1254	0.2	0.2	0.49	50	< 0.015	< 0.017	< 0.016	< 0.15	< 0.15	< 0.14	NA
PCB 1260	0.2	0.2	0.49	50	< 0.011	< 0.012	< 0.011	< 0.22	< 0.22	< 0.21	NA
Total PCBs	0.2	0.2	0.49	50	0	0	0	0	0	0	NA

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-9SW (3.5-4.0) 12/20/2011 3.5 - 4 Final	PE-10SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	PE-11SW (5.5-6.0) 12/20/2011 5.5 - 6 Final	FB(121611) 12/16/2011	FB(121911) 12/19/2011	FB(122011) 12/20/2011	TRIP BLANK(121611) 12/16/2011
Sample Date											
Depth Interval											
Validation Status											
Metals											
Aluminum	78000	3900	NS	NS	9230	9120	14300	< 7.2	< 7.2	< 7.2	NA
Antimony	31	6	14	NS	< 0.14	< 0.14	< 0.14	< 1.3	< 1.3	< 1.3	NA
Arsenic	19	19	20	NS	3.6	2.9	4.3	< 0.92	< 0.92	< 0.92	NA
Barium	16000	1300	700	NS	28.7	27.5	219	< 0.44	< 0.44	< 0.44	NA
Beryllium	16	0.5	2	NS	0.48 J	0.45 J	0.6 J	< 0.24	< 0.24	< 0.24	NA
Cadmium	78	1	39	NS	< 0.57	< 0.56	0.35 J	0.2 B	< 0.17	0.3 B	NA
Calcium	NS	NS	NS	NS	919	1250	1930	< 9	< 9	< 9	NA
Chromium	NS	NS	NS	NS	18	13.2	29.3	< 0.9	< 0.9	< 0.9	NA
Cobalt	1600	59	NS	NS	6.2	7.1	8.5	< 0.3	< 0.3	< 0.3	NA
Copper	3100	7300	600	NS	16.9	16.9	27.1	< 0.85	< 0.85	1.9 B	NA
Iron	NS	NS	NS	NS	20000	19100	23200	< 7.7	< 7.7	< 7.7	NA
Lead	400	59	400	NS	13	5.6	58.9	< 0.94	1 B	< 0.94	NA
Magnesium	NS	NS	NS	NS	3200	3680	5290	< 17	< 17	< 17	NA
Manganese	11000	42	NS	NS	403	335	572	< 0.18	< 0.18	< 0.18	NA
Mercury	23	0.1	14	NS	0.021 B	< 0.015	0.057	< 0.075	< 0.075	< 0.075	NA
Nickel	1600	31	250	NS	15.6	16.4	30.7	< 0.41	< 0.41	< 0.41	NA
Potassium	NS	NS	NS	NS	871 B	955 B	1090 B	41.9 B	< 16	< 16	NA
Selenium	390	7	63	NS	< 0.31	< 0.3	< 0.3	< 1.5	< 1.5	2.2 B	NA
Silver	390	1	110	NS	< 0.57	< 0.56	0.25 J	< 0.72	< 0.72	< 0.72	NA
Sodium	NS	NS	NS	NS	56 J	61.6 J	493 B	47.1 B	< 14	< 14	NA
Thallium	5	3	2	NS	< 0.24	< 0.24	< 0.23	< 0.17	< 0.17	< 0.17	NA
Vanadium	78	NS	370	NS	21.3	17.9	40.5	< 0.43	< 0.43	< 0.43	NA
Zinc	23000	600	1500	NS	37.7	41.2	50.1	< 1.7	< 1.7	< 1.7	NA
Other											
Cyanide	1600	13	1100	NS	< 0.24	< 0.28	< 0.27	< 0.01	< 0.01	< 0.01	NA
Solids, Percent	NS	NS	NS	NS	90.4	82.3	86.6	NA	NA	NA	NA

Results are reported in milligrams per kilogram (mg/kg).

Trip Blanks and Field Blanks reported in micrograms per liter (ug/l).

< Not detected.

NS No standard.

B Inorganic B: Result is between the detection limit and quantification limit.

J Estimated result.

PCB Polychlorinated biphenyls.

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Exceedances of NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)

Shaded Exceedances of NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)

Outlined Exceedances of NJ Residential Soil Criteria (NJAC 7:26D 5/99)

Underline Exceedances of NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	TRIP BLANK(121911) 12/19/2011	TRIP BLANK(122011) 12/20/2011
Validation Status					Final	Final
VOCs						
1,1,1-Trichloroethane	290	0.2	210	50	< 0.24	< 0.24
1,1,2,2-Tetrachloroethane	1	0.005	34	1	< 0.2	< 0.2
1,1,2-Trichloroethane	2	0.01	22	1	< 0.23	< 0.23
1,1-Dichloroethane	8	0.2	570	10	< 0.19	< 0.19
1,1-Dichloroethene	11	0.005	8	10	< 0.28	< 0.28
1,2,4-Trichlorobenzene	73	0.4	68	100	< 0.15	< 0.15
1,2-Dibromo-3-Chloropropane (DBCP)	0.08	0.005	NS	NS	< 1.3	< 1.3
1,2-Dibromoethane	0.008	0.005	NS	NS	< 0.21	< 0.21
1,2-Dichlorobenzene	5300	11	5100	50	< 0.18	< 0.18
1,2-Dichloroethane	0.9	0.005	6	1	< 0.18	< 0.18
1,2-Dichloropropane	2	0.005	10	NS	< 0.22	< 0.22
1,3-Dichlorobenzene	5300	12	5100	100	< 0.29	< 0.29
1,4-Dichlorobenzene	5	1	570	100	< 0.26	< 0.26
2-Butanone (MEK)	3100	0.6	1000	50	< 2.9	< 2.9
2-Hexanone	NS	NS	NS	NS	< 3	< 3
4-methyl-2-pentanone (MIBK)	NS	NS	1000	50	< 1.2	< 1.2
Acetone	70000	12	1000	100	< 7.6	< 7.6
Benzene	2	0.005	3	1	< 0.22	< 0.22
Bromodichloromethane	1	0.005	11	1	< 0.23	< 0.23
Bromoform	81	0.02	86	1	< 0.24	< 0.24
Bromomethane	25	0.03	79	1	< 0.31	< 0.31
Carbon disulfide	7800	4	NS	NS	< 0.18	< 0.18
Carbon tetrachloride	0.6	0.005	2	1	< 0.19	< 0.19
Chlorobenzene	510	0.4	37	1	< 0.22	< 0.22
Chloroethane	220	NS	NS	NS	< 0.37	< 0.37
Chloroform	0.6	0.2	19	1	< 0.21	< 0.21
Chloromethane	4	NS	520	10	< 0.22	< 0.22
cis-1,2-Dichloroethene	230	0.2	79	1	< 0.22	< 0.22
cis-1,3-Dichloropropene	2	0.005	4	1	< 0.22	< 0.22
Cyclohexane	NS	NS	NS	NS	< 0.29	< 0.29
Dibromochloromethane	3	0.005	110	1	< 0.2	< 0.2
Dichlorodifluoromethane	490	25	NS	NS	< 0.31	< 0.31
Ethylbenzene	7800	8	1000	100	< 0.21	< 0.21
Freon 113	NS	NS	NS	NS	< 0.49	< 0.49
Isopropylbenzene	NS	NS	NS	NS	< 0.19	< 0.19
Methyl acetate	78000	14	NS	NS	< 2.9	< 2.9
Methyl tert butyl ether	110	0.2	NS	NS	< 0.18	< 0.18
Methylcyclohexane	NS	NS	NS	NS	< 0.18	< 0.18
Methylene chloride	34	0.007	49	1	< 0.2	< 0.2
Styrene	90	2	23	100	< 0.23	< 0.23
Tetrachloroethene	2	0.005	4	1	< 0.32	< 0.32
Toluene	6300	4	1000	500	< 0.15	< 0.15
Trans-1,2-dichloroethene	300	0.4	1000	50	< 0.31	< 0.31
trans-1,3-Dichloropropene	2	0.005	4	1	< 0.19	< 0.19
Trichloroethene	7	0.007	23	1	< 0.21	< 0.21
Trichlorofluoromethane	23000	22	NS	NS	< 0.35	< 0.35
Vinyl Chloride	0.7	0.005	2	10	< 0.27	< 0.27
Xylenes	12000	12	410	67	< 0.17	< 0.17
Total TIC, Volatile	NS	NS	NS	NS	NA	NA

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	TRIP BLANK(121911)	TRIP BLANK(122011)
Sample Date					12/19/2011	12/20/2011
Depth Interval					Final	Final
Validation Status						
SVOCs						
1,1'-Biphenyl	3100	90	NS	NS	NA	NA
2,4,5-Trichlorophenol	6100	44	5600	50	NA	NA
2,4,6-Trichlorophenol	19	0.2	62	10	NA	NA
2,4-Dichlorophenol	180	0.2	170	10	NA	NA
2,4-Dimethylphenol	1200	0.7	1100	10	NA	NA
2,4-Dinitrophenol	120	0.3	110	10	NA	NA
2,4-Dinitrotoluene	0.7	NS	1	10	NA	NA
2,6-Dinitrotoluene	0.7	NS	1	10	NA	NA
2-Chloronaphthalene	NS	NS	NS	NS	NA	NA
2-Chlorophenol	310	0.5	280	10	NA	NA
2-Methylnaphthalene	230	5	NS	NS	NA	NA
2-Methylphenol	310	NS	2800	NS	NA	NA
2-Nitroaniline	39	NS	NS	NS	NA	NA
2-Nitrophenol	NS	NS	NS	NS	NA	NA
3&4-Methylphenol	NS	NS	NS	NS	NA	NA
3,3'-Dichlorobenzidine	1	0.2	2	100	NA	NA
3-Nitroaniline	NS	NS	NS	NS	NA	NA
4,6-Dinitro-2-methylphenol	6	0.3	NS	NS	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NA	NA
4-Chloro-3-Methylphenol	NS	NS	10000	100	NA	NA
4-Chloroaniline	NS	NS	230	NS	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NA	NA
4-Nitroaniline	NS	NS	NS	NS	NA	NA
4-Nitrophenol	NS	NS	NS	NS	NA	NA
Acenaphthene	3400	74	3400	100	NA	NA
Acenaphthylene	NS	NS	NS	NS	NA	NA
Acetophenone	2	2	NS	NS	NA	NA
Anthracene	17000	1500	10000	100	NA	NA
Atrazine	210	0.2	NS	NS	NA	NA
Benzaldehyde	6100	NS	NS	NS	NA	NA
Benzo(a)anthracene	0.6	0.5	0.9	500	NA	NA
Benzo(a)pyrene	0.2	0.2	0.66	100	NA	NA
Benzo(b)fluoranthene	0.6	2	0.9	50	NA	NA
Benzo(g,h,i)perylene	380000	NS	NS	NS	NA	NA
Benzo(k)fluoranthene	6	16	0.9	500	NA	NA
Benzyl butyl phthalate	1200	150	1100	100	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NA	NA
bis(2-Chloroethyl)ether	0.4	0.2	0.66	10	NA	NA
bis(2-Chloroisopropyl)ether	23	3	2300	10	NA	NA
bis(2-Ethylhexyl)phthalate	35	790	49	100	NA	NA
Caprolactam	31000	8	NS	NS	NA	NA
Carbazole	24	NS	NS	NS	NA	NA
Chrysene	62	52	9	500	NA	NA
Dibenzo(a,h)anthracene	0.2	0.5	0.66	100	NA	NA
Dibenzofuran	NS	NS	NS	NS	NA	NA
Diethyl phthalate	49000	57	10000	50	NA	NA
Dimethyl phthalate	NS	NS	10000	50	NA	NA
di-n-butyl phthalate	6100	620	5700	100	NA	NA
di-n-octylphthalate	2400	3300	1100	100	NA	NA
Fluoranthene	2300	840	2300	100	NA	NA
Fluorene	2300	110	2300	100	NA	NA

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	TRIP BLANK(121911)	TRIP BLANK(122011)
Sample Date					12/19/2011	12/20/2011
Depth Interval					Final	Final
Validation Status						
Hexachlorobenzene	0.3	0.2	0.66	100	NA	NA
Hexachlorobutadiene	6	0.6	1	100	NA	NA
Hexachlorocyclopentadiene	45	210	400	100	NA	NA
Hexachloroethane	35	0.2	6	100	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	5	0.9	500	NA	NA
Isophrone	510	0.2	1100	50	NA	NA
Naphthalene	6	16	230	100	NA	NA
Nitrobenzene	31	0.2	28	50	NA	NA
N-Nitroso-di-n-Propylamine	0.2	0.2	0.66	10	NA	NA
N-Nitrosodiphenylamine	99	0.2	140	1000	NA	NA
Pentachlorophenol	3	0.3	6	100	NA	NA
Phenanthrene	NS	NS	NS	NS	NA	NA
Phenol	18000	5	10000	50	NA	NA
Pyrene	1700	550	1700	100	NA	NA
Total TIC, Semi-Volatile	NS	NS	NS	NS	NA	NA
Pesticides						
4,4-DDD	3	3	3	50	NA	NA
4,4-DDE	2	12	2	50	NA	NA
4,4-DDT	2	7	2	500	NA	NA
Aldrin	0.04	0.1	0.04	50	NA	NA
alpha-BHC	0.1	0.002	NS	NS	NA	NA
alpha-Chlordane	0.2	0.03	NS	NS	NA	NA
beta-BHC	0.4	0.002	NS	NS	NA	NA
delta-BHC	NS	NS	NS	NS	NA	NA
Dieldrin	0.04	0.003	0.042	50	NA	NA
Endosulfan I (alpha)	470	2	NS	NS	NA	NA
Endosulfan II (beta)	470	2	NS	NS	NA	NA
Endosulfan sulfate	470	1	NS	NS	NA	NA
Endrin	23	0.6	17	50	NA	NA
Endrin Aldehyde	NS	NS	NS	NS	NA	NA
Endrin ketone	NS	NS	NS	NS	NA	NA
gamma-Chlordane	0.2	0.03	NS	NS	NA	NA
Heptachlor	0.1	0.3	0.15	50	NA	NA
Heptachlor epoxide	0.07	0.009	NS	NS	NA	NA
Lindane	0.4	0.002	0.52	50	NA	NA
Methoxychlor	390	100	280	50	NA	NA
Toxaphene	0.6	0.2	0.1	50	NA	NA
PCBs						
PCB 1016	0.2	0.2	0.49	50	NA	NA
PCB 1221	0.2	0.2	0.49	50	NA	NA
PCB 1232	0.2	0.2	0.49	50	NA	NA
PCB 1242	0.2	0.2	0.49	50	NA	NA
PCB 1248	0.2	0.2	0.49	50	NA	NA
PCB 1254	0.2	0.2	0.49	50	NA	NA
PCB 1260	0.2	0.2	0.49	50	NA	NA
Total PCBs	0.2	0.2	0.49	50	NA	NA

Table 2: Summary of SR-13 Post Excavation Results for the December 2011 Excavation, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	TRIP BLANK(121911)	TRIP BLANK(122011)
Sample Date					12/19/2011	12/20/2011
Depth Interval					Final	Final
Validation Status						
Metals						
Aluminum	78000	3900	NS	NS	NA	NA
Antimony	31	6	14	NS	NA	NA
Arsenic	19	19	20	NS	NA	NA
Barium	16000	1300	700	NS	NA	NA
Beryllium	16	0.5	2	NS	NA	NA
Cadmium	78	1	39	NS	NA	NA
Calcium	NS	NS	NS	NS	NA	NA
Chromium	NS	NS	NS	NS	NA	NA
Cobalt	1600	59	NS	NS	NA	NA
Copper	3100	7300	600	NS	NA	NA
Iron	NS	NS	NS	NS	NA	NA
Lead	400	59	400	NS	NA	NA
Magnesium	NS	NS	NS	NS	NA	NA
Manganese	11000	42	NS	NS	NA	NA
Mercury	23	0.1	14	NS	NA	NA
Nickel	1600	31	250	NS	NA	NA
Potassium	NS	NS	NS	NS	NA	NA
Selenium	390	7	63	NS	NA	NA
Silver	390	1	110	NS	NA	NA
Sodium	NS	NS	NS	NS	NA	NA
Thallium	5	3	2	NS	NA	NA
Vanadium	78	NS	370	NS	NA	NA
Zinc	23000	600	1500	NS	NA	NA
Other						
Cyanide	1600	13	1100	NS	NA	NA
Solids, Percent	NS	NS	NS	NS	NA	NA

Results are reported in milligrams per kilogram (mg/kg).

Trip Blanks and Field Blanks reported in micrograms per liter (ug/l).

< Not detected.

NS No standard.

B Inorganic B: Result is between the detection limit and quantification limit.

J Estimated result.

PCB Polychlorinated biphenyls.

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Exceedances of NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)

Shaded Exceedances of NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)

Outlined Exceedances of NJ Residential Soil Criteria (NJAC 7:26D 5/99)

Underline Exceedances of NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-6B(7.5-8.0) 1/6/2012 Final	PE-7B(10.0-10.5) 1/6/2012 Final	PE-8B(7.0-7.5) 1/10/2012 Final	PE-9B(11.0-11.5) 1/10/2012 Final	PE-10B(9.0-9.5) 1/12/2012 Final	PE-11B(9.0-9.5) 1/13/2012 Final	PE-11SW(7.5-8.0) 1/6/2012 Final
Sample Date					7.5 - 8	10 - 10.5	7 - 7.5	11 - 11.5	9 - 9.5	9 - 9.5	
Depth Interval											7.5 - 8
Validation Status											
VOCs											
1,1,1-Trichloroethane	290	0.2	210	50	< 0.00022	< 0.0002	< 0.00019	< 0.0002	< 0.00021	< 0.0002	< 0.0002
1,1,2,2-Tetrachloroethane	1	0.005	34	1	< 0.00017	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00015	< 0.00015
1,1,2-Trichloroethane	2	0.01	22	1	< 0.0004	< 0.00036	< 0.00034	< 0.00037	< 0.00038	< 0.00036	< 0.00035
1,1-Dichloroethane	8	0.2	570	10	< 0.0002	< 0.00018	< 0.00017	< 0.00018	< 0.00019	< 0.00018	< 0.00018
1,1-Dichloroethene	11	0.005	8	10	< 0.00057	< 0.00051	< 0.00049	< 0.00052	< 0.00053	< 0.0005	< 0.0005
1,2,4-Trichlorobenzene	73	0.4	68	100	< 0.00032	< 0.00028	< 0.00027	< 0.00029	< 0.0003	< 0.00028	< 0.00028
1,2-Dibromo-3-Chloropropane (DBCP)	0.08	0.005	NS	NS	< 0.0014	< 0.0013	< 0.0012	< 0.0013	< 0.0013	< 0.0012	< 0.0012
1,2-Dibromoethane	0.008	0.005	NS	NS	< 0.00022	< 0.0002	< 0.00019	< 0.0002	< 0.00021	< 0.0002	< 0.00019
1,2-Dichlorobenzene	5300	11	5100	50	< 0.00026	< 0.00023	< 0.00022	< 0.00023	< 0.00024	< 0.00023	< 0.00022
1,2-Dichloroethane	0.9	0.005	6	1	< 0.00017	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00015	< 0.00015
1,2-Dichloropropane	2	0.005	10	NS	< 0.00025	< 0.00022	< 0.00021	< 0.00023	< 0.00023	< 0.00022	< 0.00022
1,3-Dichlorobenzene	5300	12	5100	100	< 0.00018	< 0.00016	< 0.00015	< 0.00016	< 0.00017	< 0.00016	< 0.00016
1,4-Dichlorobenzene	5	1	570	100	< 0.00016	< 0.00014	< 0.00013	< 0.00014	< 0.00015 J	< 0.00014	< 0.00014
2-Butanone (MEK)	3100	0.6	1000	50	< 0.004	< 0.0036	< 0.0034	< 0.0037	< 0.0038	< 0.0036	< 0.0035
2-Hexanone	NS	NS	NS	NS	< 0.0023	< 0.0021	< 0.002	< 0.0021	< 0.0022	< 0.002	< 0.002
4-methyl-2-pentanone (MIBK)	NS	NS	1000	50	< 0.0025	< 0.0022	< 0.0021	< 0.0022	< 0.0023	< 0.0022	< 0.0021
Acetone	70000	12	1000	100	< 0.0062	< 0.0055	< 0.0052	< 0.0056	< 0.0057	< 0.0054	< 0.0054
Benzene	2	0.005	3	1	< 0.00012	< 0.00011	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011
Bromodichloromethane	1	0.005	11	1	< 0.00021	< 0.00019	< 0.00018	< 0.00019	< 0.00019	< 0.00018	< 0.00018
Bromoform	81	0.02	86	1	< 0.0007	< 0.00063	< 0.0006	< 0.00064	< 0.00066	< 0.00062	< 0.00061
Bromomethane	25	0.03	79	1	< 0.00037	< 0.00033	< 0.00031	< 0.00033	< 0.00034	< 0.00032	< 0.00032
Carbon disulfide	7800	4	NS	NS	< 0.00018	< 0.00016	< 0.00016	< 0.00017	< 0.00017	< 0.00016	< 0.00016
Carbon tetrachloride	0.6	0.005	2	1	< 0.00032	< 0.00029	< 0.00027	< 0.00029	< 0.0003	< 0.00028	< 0.00028
Chlorobenzene	510	0.4	37	1	< 0.0003	< 0.00027	< 0.00026	< 0.00027	< 0.00028	< 0.00026	< 0.00026
Chloroethane	220	NS	NS	NS	< 0.00038	< 0.00034	< 0.00032	< 0.00035	< 0.00035	< 0.00034	< 0.00033
Chloroform	0.6	0.2	19	1	< 0.00045	< 0.0004	< 0.00038	< 0.00041	< 0.00042	< 0.0004	< 0.00039
Chloromethane	4	NS	520	10	< 0.00058	< 0.00052	< 0.00049	< 0.00053	< 0.00054	< 0.00051	< 0.00051
cis-1,2-Dichloroethene	230	0.2	79	1	< 0.0003	< 0.00027	< 0.00026	< 0.00027	0.0004 J	< 0.00026	< 0.00026
cis-1,3-Dichloropropene	2	0.005	4	1	< 0.00014	< 0.00013	< 0.00012	< 0.00013	< 0.00013	< 0.00013	< 0.00012
Cyclohexane	NS	NS	NS	NS	< 0.00035	< 0.00032	< 0.0003	< 0.00032	< 0.00033	< 0.00031	< 0.00031
Dibromochloromethane	3	0.005	110	1	< 0.00016	< 0.00014	< 0.00013	< 0.00014	< 0.00015	< 0.00014	< 0.00014
Dichlorodifluoromethane	490	25	NS	NS	< 0.0003	< 0.00027	< 0.00025	< 0.00027	< 0.00028	< 0.00026	< 0.00026
Ethylbenzene	7800	8	1000	100	< 0.00014	< 0.00012	< 0.00012	0.00024 J	0.0014	0.00043 J	< 0.00012
Freon 113	NS	NS	NS	NS	< 0.00067	< 0.0006	< 0.00057	< 0.00061	< 0.00062	< 0.00059	< 0.00058
Isopropylbenzene	NS	NS	NS	NS	< 0.00013	< 0.00011	< 0.00011	< 0.00012	0.0008 J	0.0002 J	< 0.00011
Methyl acetate	78000	14	NS	NS	< 0.0021	< 0.0018	< 0.0018	< 0.0019	< 0.0019	< 0.0018	< 0.0018
Methyl tert butyl ether	110	0.2	NS	NS	< 0.00017	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00015	< 0.00015
Methylcyclohexane	NS	NS	NS	NS	< 0.00023	< 0.0002	< 0.00019	< 0.00021	< 0.00021	< 0.0002	< 0.0002
Methylene chloride	34	0.007	49	1	< 0.00021	< 0.00019	< 0.00018	< 0.0002	< 0.0002	< 0.00019	< 0.00019
Styrene	90	2	23	100	< 0.00017	< 0.00015	< 0.00015	< 0.00016	< 0.00016	< 0.00016	< 0.00015
Tetrachloroethene	2	0.005	4	1	< 0.00018	< 0.00016	< 0.00015	< 0.00016	< 0.00017	< 0.00016	< 0.00015
Toluene	6300	4	1000	500	< 0.00035	< 0.00031	< 0.0003	< 0.00032	0.00094	< 0.00031	< 0.00031
Trans-1,2-dichloroethene	300	0.4	100								

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-6B(7.5-8.0) 1/6/2012 Final	PE-7B(10.0-10.5) 1/6/2012 Final	PE-8B(7.0-7.5) 1/10/2012 Final	PE-9B(11.0-11.5) 1/10/2012 Final	PE-10B(9.0-9.5) 1/12/2012 Final	PE-11B(9.0-9.5) 1/13/2012 Final	PE-11SW(7.5-8.0) 1/6/2012 Final	
Validation Status												
SVOCs												
1,1'-Biphenyl	3100	90	NS	NS	< 0.0036	< 0.0036	< 0.0037	< 0.0037	< 0.0038	< 0.0036	< 0.0037	
2,4,5-Trichlorophenol	6100	44	5600	50	< 0.036	< 0.036	< 0.037	< 0.037	< 0.038	< 0.036	< 0.037	
2,4,6-Trichlorophenol	19	0.2	62	10	< 0.03	< 0.029	< 0.03	< 0.03	< 0.031	< 0.029	< 0.03	
2,4-Dichlorophenol	180	0.2	170	10	< 0.051	< 0.05	< 0.052	< 0.052	< 0.053	< 0.05	< 0.051	
2,4-Dimethylphenol	1200	0.7	1100	10	< 0.053	< 0.053	< 0.054	< 0.054	< 0.055	< 0.052	< 0.054	
2,4-Dinitrophenol	120	0.3	110	10	< 0.038	< 0.038	< 0.039	< 0.039	< 0.04	< 0.038	< 0.039	
2,4-Dinitrotoluene	0.7	NS	1	10	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	
2,6-Dinitrotoluene	0.7	NS	1	10	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	
2-Chloronaphthalene	NS	NS	NS	NS	< 0.0097	< 0.0097	< 0.01	< 0.0099	< 0.01	< 0.0097	< 0.0099	
2-Chlorophenol	310	0.5	280	10	< 0.032	< 0.032	< 0.032	< 0.032	< 0.033	< 0.032	< 0.032	
2-Methylnaphthalene	230	5	NS	NS	< 0.018	< 0.018	< 0.018	< 0.018	< 0.018	< 0.017	< 0.018	
2-Methylphenol	310	NS	2800	NS	< 0.036	< 0.036	< 0.037	< 0.036	< 0.037	< 0.036	< 0.036	
2-Nitroaniline	39	NS	NS	NS	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	
2-Nitrophenol	NS	NS	NS	NS	< 0.033	< 0.033	< 0.034	< 0.034	< 0.035	< 0.033	< 0.034	
3&4-Methylphenol	NS	NS	NS	NS	< 0.04	< 0.04	< 0.041	< 0.041	< 0.042	< 0.04	< 0.041	
3,3'-Dichlorobenzidine	1	0.2	2	100	< 0.008	< 0.008	< 0.0082	< 0.0082	< 0.0081	< 0.0083	< 0.0079	< 0.0081
3-Nitroaniline	NS	NS	NS	NS	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.012	< 0.013	
4,6-Dinitro-2-methylphenol	6	0.3	NS	NS	< 0.038	< 0.038	< 0.039	< 0.039	< 0.04	< 0.038	< 0.039	
4-Bromophenyl phenyl ether	NS	NS	NS	NS	< 0.011	< 0.011	< 0.012	< 0.012	< 0.012	< 0.011	< 0.012	
4-Chloro-3-Methylphenol	NS	NS	10000	100	< 0.031	< 0.031	< 0.032	< 0.032	< 0.033	< 0.031	< 0.032	
4-Chloroaniline	NS	NS	230	NS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	< 0.0095	< 0.0094	< 0.0097	< 0.0096	< 0.0099	< 0.0094	< 0.0096	
4-Nitroaniline	NS	NS	NS	NS	< 0.012	< 0.012	< 0.013	< 0.012	< 0.013	< 0.012	< 0.012	
4-Nitrophenol	NS	NS	NS	NS	< 0.053	< 0.053	< 0.054	< 0.054	< 0.055	< 0.053	< 0.054	
Acenaphthene	3400	74	3400	100	< 0.0091	< 0.0091	< 0.0093	< 0.0093	< 0.0095	< 0.0091	< 0.0093	
Acenaphthylene	NS	NS	NS	NS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Acetophenone	2	2	NS	NS	< 0.0055	< 0.0055	< 0.0057	< 0.0057	< 0.0058	< 0.0055	< 0.0056	
Anthracene	17000	1500	10000	100	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	
Atrazine	210	0.2	NS	NS	< 0.0062	< 0.0062	< 0.0063	< 0.0063	< 0.0064	< 0.0062	< 0.0063	
Benzaldehyde	6100	NS	NS	NS	< 0.0072	< 0.0072	< 0.0074	< 0.0074	< 0.0075	< 0.0072	< 0.0074	
Benzo(a)anthracene	0.6	0.5	0.9	500	< 0.01	< 0.01	< 0.01 J	< 0.01 J	< 0.011 J	< 0.01 J	< 0.01	
Benzo(a)pyrene	0.2	0.2	0.66	100	< 0.0096	< 0.0096	< 0.0098	< 0.0098	< 0.01	< 0.0095 J	< 0.0097	
Benzo(b)fluoranthene	0.6	2	0.9	50	< 0.01	< 0.01	< 0.011	< 0.011	< 0.011	< 0.01 J	< 0.011	
Benzo(g,h,i)perylene	380000	NS	NS	NS	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012 J	< 0.012 J	
Benzo(k)fluoranthene	6	16	0.9	500	< 0.012	< 0.012	< 0.012 J	< 0.012 J	< 0.012 J	< 0.012 J	< 0.012	
Benzyl butyl phthalate	1200	150	1100	100	< 0.018	< 0.018	< 0.019	< 0.019	< 0.019	< 0.018	< 0.019	
bis(2-Chloroethoxy)methane	NS	NS	NS	NS	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	
bis(2-Chloroethyl)ether	0.4	0.2	0.66	10	< 0.0095	< 0.0094	< 0.0097	< 0.0096	< 0.0099	< 0.0094	< 0.0096	
bis(2-Chloroisopropyl)ether	23	3	2300	10	< 0.0093	< 0.0093	< 0.0095	< 0.0095	< 0.0097	< 0.0093	< 0.0095	
bis(2-Ethylhexyl)phthalate	35	790	49	100	< 0.028	< 0.028	< 0.028	< 0.028	< 0.029	< 0.028	< 0.028	
Caprolactam	31000	8	NS	NS	< 0.0099	< 0.0099	< 0.01	< 0.01	< 0.01	< 0.0098	< 0.01	
Carbazole	24	NS	NS	NS	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.014	< 0.015	
Chrysene	62	52	9	500	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011 J	< 0.011 J	
Dibenzo(a,h)anthracene	0.2	0.5	0.66	100	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011 J	< 0.011 J	
Dibenzofuran	NS	NS	NS	NS	< 0.0093	< 0.0093	< 0.0095	< 0.0095	< 0.0097	< 0.0093	< 0.0095	
Diethyl phthalate	49000	57	10000	50	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	
Dimethyl phthalate	NS	NS	10000	50	0.0328 J	0.0383 J	< 0.011	0.049 J	< 0.012	< 0.011	0.0483 J	

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Sample ID	NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)	NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D)	NJ Residential Soil Criteria (NJAC 7:26D)	NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)	PE-6B(7.5-8.0) 1/6/2012 7.5 - 8 Final	PE-7B(10.0-10.5) 1/6/2012 10 - 10.5 Final	PE-8B(7.0-7.5) 1/10/2012 7 - 7.5 Final	PE-9B(11.0-11.5) 1/10/2012 11 - 11.5 Final	PE-10B(9.0-9.5) 1/12/2012 9 - 9.5 Final	PE-11B(9.0-9.5) 1/13/2012 9 - 9.5 Final	PE-11SW(7.5-8.0) 1/6/2012 7.5 - 8 Final	
Sample Date												
Depth Interval												
Validation Status												
Hexachlorobenzene	0.3	0.2	0.66	100	< 0.01	< 0.01	< 0.01	< 0.01	< 0.011	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	6	0.6	1	100	< 0.0087	< 0.0087	< 0.0089	< 0.0089	< 0.0091	< 0.0087	< 0.0087	< 0.0089
Hexachlorocyclopentadiene	45	210	400	100	< 0.032	< 0.032	< 0.033	< 0.033	< 0.033	< 0.032	< 0.032	< 0.033
Hexachloroethane	35	0.2	6	100	< 0.0087	< 0.0087	< 0.0089	< 0.0089	< 0.0091	< 0.0087	< 0.0087	< 0.0089
Indeno(1,2,3-cd)pyrene	0.6	5	0.9	500	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011 J	< 0.011	< 0.011
Isophrone	510	0.2	1100	50	< 0.0085	< 0.0084	< 0.0086	< 0.0086	< 0.0088	< 0.0084	< 0.0086	< 0.0086
Naphthalene	6	16	230	100	< 0.0086	< 0.0086	< 0.0088	< 0.0087	< 0.0089	< 0.0085	< 0.0087	< 0.0087
Nitrobenzene	31	0.2	28	50	< 0.0091	< 0.0091	< 0.0093	< 0.0093	< 0.0095	< 0.009	< 0.0092	< 0.0092
N-Nitroso-di-n-Propylamine	0.2	0.2	0.66	10	< 0.0077	< 0.0077	< 0.0078	< 0.0078	< 0.008	< 0.0076	< 0.0076	< 0.0078
N-Nitrosodiphenylamine	99	0.2	140	1000	< 0.019	< 0.019	< 0.019	< 0.019	< 0.02	< 0.019	< 0.019	< 0.019
Pentachlorophenol	3	0.3	6	100	< 0.054	< 0.054	< 0.055	< 0.055	< 0.056	< 0.053	< 0.055	< 0.055
Phanthrene	NS	NS	NS	NS	< 0.014	< 0.014	< 0.015	< 0.015	< 0.015	< 0.014	< 0.014	< 0.015
Phenol	18000	5	10000	50	< 0.033	< 0.033	< 0.034	< 0.034	< 0.034	< 0.033	< 0.034	< 0.034
Pyrene	1700	550	1700	100	< 0.012	< 0.012	< 0.012	< 0.012	< 0.013	< 0.012	< 0.012	< 0.012
Total TIC, Semi-Volatile	NS	NS	NS	NS	0.15 J	0	0.16 J	0	0	0	0	0
Pesticides												
4,4-DDD	3	3	3	50	< 0.00033	< 0.00033	< 0.00034	< 0.00034	< 0.00034	< 0.00034	< 0.00034	< 0.00034
4,4-DDE	2	12	2	50	< 0.00038	< 0.00038	< 0.00039	< 0.00039	< 0.0004	< 0.00039	< 0.00039	< 0.00039
4,4-DDT	2	7	2	500	< 0.00047	< 0.00047	< 0.00049	< 0.00049	< 0.00049	< 0.00048	< 0.00048	< 0.00048
Aldrin	0.04	0.1	0.04	50	< 0.00032	< 0.00032	< 0.00033	< 0.00033	< 0.00034	< 0.00033	< 0.00033	< 0.00033
alpha-BHC	0.1	0.002	NS	NS	< 0.00048	< 0.00048	< 0.0005	< 0.0005	< 0.0005	< 0.00049	< 0.00049	< 0.00049
alpha-Chlordane	0.2	0.03	NS	NS	< 0.00042	< 0.00042	< 0.00043	< 0.00043	< 0.00044	< 0.00044	< 0.00043	< 0.00043
beta-BHC	0.4	0.002	NS	NS	< 0.00045	< 0.00045	< 0.00046	< 0.00047	< 0.00047	< 0.00046	< 0.00046	< 0.00046
delta-BHC	NS	NS	NS	NS	< 0.00038	< 0.00038	< 0.00039	< 0.00039	< 0.00039	< 0.00038	< 0.00038	< 0.00038
Dieldrin	0.04	0.003	0.042	50	< 0.0005	< 0.0005	< 0.00051	< 0.00051	< 0.00052	< 0.00051	< 0.00051	< 0.00051
Endosulfan I (alpha)	470	2	NS	NS	< 0.00031	< 0.00031	< 0.00032	< 0.00032	< 0.00033	< 0.00032	< 0.00032	< 0.00032
Endosulfan II (beta)	470	2	NS	NS	< 0.00043	< 0.00043	< 0.00044	< 0.00044	< 0.00044	< 0.00043	< 0.00043	< 0.00043
Endosulfan sulfate	470	1	NS	NS	< 0.00059	< 0.00058	< 0.0006	< 0.0006	< 0.00061	< 0.0006	< 0.0006	< 0.0006
Endrin	23	0.6	17	50	< 0.00033	< 0.00033	< 0.00034	< 0.00034	< 0.00034	< 0.00034	< 0.00034	< 0.00034
Endrin Aldehyde	NS	NS	NS	NS	< 0.00061	< 0.00061	< 0.00063	< 0.00063	< 0.00064	< 0.00062	< 0.00062	< 0.00062
Endrin ketone	NS	NS	NS	NS	< 0.00042	< 0.00042	< 0.00043 J	< 0.00043 J	< 0.00044 J	< 0.00043	< 0.00043	< 0.00043
gamma-Chlordane	0.2	0.03	NS	NS	< 0.00033	< 0.00033	< 0.00034	< 0.00034	< 0.00034	< 0.00034	< 0.00034	< 0.00034
Heptachlor	0.1	0.3	0.15	50	< 0.0004	< 0.0004	< 0.00041	< 0.00041	< 0.00041	< 0.00041	< 0.0004	< 0.0004
Heptachlor epoxide	0.07	0.009	NS	NS	< 0.00032	< 0.00032	< 0.00033	< 0.00033	< 0.00033	< 0.00032	< 0.00032	< 0.00032
Lindane	0.4	0.002	0.52	50	< 0.0003	< 0.00029	< 0.0003	< 0.0003	< 0.0003	< 0.00031	< 0.0003	< 0.0003
Methoxychlor	390	100	280	50	< 0.00046	< 0.00046	< 0.00047	< 0.00047	< 0.00048 J	< 0.00046	< 0.00046	< 0.00046
Toxaphene	0.6	0.2	0.1	50	< 0.0082	< 0.0081	< 0.0083	< 0.0084	< 0.0085	< 0.0083	< 0.0083	< 0.0083
PCBs												
PCB 1016	0.2	0.2	0.49	50	< 0.0084	< 0.0084	< 0.0086	< 0.0087	< 0.0088	< 0.0086	< 0.0086	< 0.0086
PCB 1221	0.2	0.2	0.49	50	< 0.019	< 0.019	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB 1232	0.2	0.2	0.49	50	< 0.016	< 0.016	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
PCB 1242	0.2	0.2	0.49	50	< 0.01	< 0.01	< 0.011	< 0.011	< 0.011	< 0.01	< 0.01	< 0.01
PCB 1248	0.2	0.2	0.49	50	< 0.0098	< 0.0098	< 0.01	< 0.01	< 0.01	<		

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Sample Date												
Depth Interval					7.5 - 8 Final	10 - 10.5 Final	7 - 7.5 Final	11 - 11.5 Final	9 - 9.5 Final	9 - 9.5 Final	7.5 - 8 Final	
Validation Status												
Metals												
Aluminum	78000	3900	NS	NS	7630	8230	9110	9950	9140	11100	7410	
Antimony	31	6	14	NS	< 0.17	< 0.17	< 0.17	< 0.16	0.33 J	< 0.17	< 0.17	
Arsenic	19	19	20	NS	3.9	3	3.4	3.5	3.1	4.5	2.2	
Barium	16000	1300	700	NS	35.3	29.2	30.1	32.5	42.3	36.3	29.4	
Beryllium	16	0.5	2	NS	0.41	0.39	0.42	0.51	0.37 J	0.51	0.38	
Cadmium	78	1	39	NS	< 0.56	< 0.55	< 0.58	< 0.55	< 0.039	< 0.58	< 0.038	
Calcium	NS	NS	NS	NS	1680	1390	1580	1540	1470	1480	2150	
Chromium	NS	NS	NS	NS	14.6	12.4	13.6	14.2	13.8	15	12.7	
Cobalt	1600	59	NS	NS	6.5	6.6	6.6	6.6	6.9	8	6.5	
Copper	3100	7300	600	NS	18.3	16.8	17.4	23.2	20.1	21.2	17.2	
Iron	NS	NS	NS	NS	18800	17000	20900	20200	19800	21600	17600	
Lead	400	59	400	NS	5	5.8	22.9	9.1	12.6	8.6	3.8	
Magnesium	NS	NS	NS	NS	3130	3910	3880	3390	3760	3960	2810	
Manganese	11000	42	NS	NS	579	384	540	438	470	414	130	
Mercury	23	0.1	14	NS	< 0.014	< 0.013	0.014 J	< 0.014	0.015 J	0.013 J	< 0.013	
Nickel	1600	31	250	NS	16.7	16.1	18.7	17.5	17.1	20.2	14.1	
Potassium	NS	NS	NS	NS	914 B	1050 B	962 B	995 B	1100	1320	713 B	
Selenium	390	7	63	NS	< 0.3	< 0.3	1.1 B	1.2 B	0.31 J	< 0.31	< 0.3	
Silver	390	1	110	NS	0.078 B	< 0.077	0.42 B	0.4 B	< 0.078	< 0.08	< 0.077	
Sodium	NS	NS	NS	NS	76.3 B	71.6 B	56.4 B	55.1 B	86.5 J	91.8 J	87.1 B	
Thallium	5	3	2	NS	< 0.23	< 0.23	< 0.24	< 0.23	< 0.24	< 0.24	< 1.2	< 0.23
Vanadium	78	NS	370	NS	22.6	15	17.4	20.3	21.6	20.3	25.7	
Zinc	23000	600	1500	NS	40	39	49.4	45.7	41.6	49.6	30.4	
Other												
Cyanide	1600	13	1100	NS	< 0.24	< 0.26	< 0.26	< 0.25	< 0.26	< 0.27	< 0.26	
Solids, Percent	NS	NS	NS	NS	90.9	91.1	88.9	88	87.3	89.4	89.4	

Results are reported in milligrams per kilogram (mg/kg).

Trip Blanks and Field Blanks reported in micrograms per liter (ug/l).

< Not detected.

NS No standard.

B Inorganic B: Result is between the detection limit and quantification limit.

J Estimated result.

PCB Polychlorinated biphenyls.

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Exceedances of NJ Residential Direct Contact Soil (NJAC 7: 26D 6/08)

Shaded Exceedances of NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)

Outlined Exceedances of NJ Residential Soil Criteria (NJAC 7:26D 5/99)

Underline Exceedances of NJ Impact to Groundwater Soil Criteria (NJAC 7:26D 5/99)

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

PE-12B(9.0-9.5)	PE-12SW(9.5-10.0)	PE-13B (9.0-9.5)	PE-13SW(6.5-7.0)	PE-13SW(6.5-7.0) DUP	PE-14SW(9.5-10.0)	PE-14SW-2 (033012)	PE-15SW(6.5-7.0)	PE-16SW(10.5-11.0)	PE-17SW(6.5-7.0)	PE-18SW(10.5-11.0)	PE-19SW(8.5-9.0)	PE-20SW(10.5-11.0)
1/16/2012	1/6/2012	1/18/2012	1/6/2012	1/6/2012	1/6/2012	3/30/2012	1/10/2012	1/10/2012	1/10/2012	1/12/2012	1/12/2012	1/12/2012
9 - 9	9.5 - 10	9 - 9.5	6.5 - 7	6.5 - 7	9.5 - 10	Final	Final	Final	Final	Final	Final	Final
Final	Final	Final	Final	Final	Final	NA	Final	Final	Final	Final	Final	Final
< 0.00019	< 0.00025	< 0.00025	< 0.00021	< 0.00022	< 0.00022	NA	< 0.0002	< 0.00019	< 0.00022	< 0.00021	< 0.00022	< 0.00023
< 0.00014	< 0.00019	< 0.00019	< 0.00016	< 0.00016	< 0.00017	NA	< 0.00015	< 0.00014	< 0.00016	< 0.00016	< 0.00016	< 0.00017
< 0.00034	< 0.00046	< 0.00045	< 0.00038	< 0.00039	< 0.0004	NA	< 0.00037	< 0.00034	< 0.00039	< 0.00038	< 0.00039	< 0.00041
< 0.00017	< 0.00023	< 0.00023	< 0.00019	< 0.00019	< 0.0002	NA	< 0.00018	< 0.00017	< 0.0002	< 0.00019	< 0.00019	< 0.00021
< 0.00048	< 0.00065	< 0.00064	< 0.00054	< 0.00055	< 0.00057	NA	< 0.00052	< 0.00047	< 0.00055	< 0.00054	< 0.00055	< 0.00058
< 0.00027	< 0.00036	< 0.00035	< 0.0003	< 0.0003	< 0.00031	NA	< 0.00029	< 0.00026	< 0.00031	< 0.0003	0.00041 J	< 0.00032
< 0.0012	< 0.0016	< 0.0016	< 0.0013	< 0.0013	< 0.0014	NA	< 0.0013	< 0.0012	< 0.0014	< 0.0013	< 0.0013	< 0.0014
< 0.00019	< 0.00025	< 0.00025	< 0.00021	< 0.00021	< 0.00022	NA	< 0.0002	< 0.00018	< 0.00021	< 0.00021	< 0.00021	< 0.00023
< 0.00022	< 0.00029	< 0.00029	< 0.00024	< 0.00025	< 0.00026	NA	< 0.00023	< 0.00021	< 0.00025	< 0.00024	< 0.00025	< 0.00026
< 0.00014	< 0.00019	< 0.00019	< 0.00016	< 0.00016	< 0.00017	NA	< 0.00015	< 0.00014	< 0.00016	< 0.00016	< 0.00016	< 0.00017
< 0.00021	< 0.00028	< 0.00028	< 0.00023	< 0.00024	< 0.00025	NA	< 0.00023	< 0.00021	< 0.00024	< 0.00023	< 0.00024	< 0.00025
< 0.00015	< 0.0002	< 0.0002	< 0.00017	< 0.00017	< 0.00018	NA	< 0.00016	< 0.00015	< 0.00017	< 0.00017	< 0.00017	< 0.00018
< 0.00013 J	< 0.00018	< 0.00018	< 0.00015	< 0.00015	< 0.00016	NA	< 0.00014	< 0.00013	< 0.00015	< 0.00015 J	< 0.00015 J	< 0.00016 J
< 0.0034	< 0.0046	< 0.0045	< 0.0038	< 0.0039	< 0.004	NA	< 0.0037	< 0.0034	< 0.0039	< 0.0038	< 0.0039	< 0.0041
< 0.0019	< 0.0026	< 0.0026	< 0.0022	< 0.0022	< 0.0023	NA	< 0.0021	< 0.0019	< 0.0022	< 0.0022	< 0.0022	< 0.0024
< 0.0021	< 0.0028	< 0.0027	< 0.0023	< 0.0024	< 0.0024	NA	< 0.0022	< 0.002	< 0.0024	< 0.0023	< 0.0023	< 0.0025
< 0.0052	< 0.007	< 0.0069	< 0.0058	< 0.0059	< 0.0061	NA	< 0.0056	< 0.0051	< 0.006	< 0.0058	< 0.0059	< 0.0063
< 0.0001	< 0.0014	< 0.0014	< 0.00012	< 0.00012	< 0.00012	NA	< 0.00011	< 0.0001	< 0.00012	< 0.00012	< 0.00012	< 0.00013
< 0.00018	< 0.00024	< 0.00023	< 0.0002	< 0.0002	< 0.00021	NA	< 0.00019	< 0.00017	< 0.0002	< 0.0002	< 0.0002	< 0.00021
< 0.00059	< 0.0008	< 0.00078	< 0.00067	< 0.00067	< 0.0007	NA	< 0.00064	< 0.00058	< 0.00068	< 0.00067	< 0.00067	< 0.00072
< 0.00031	< 0.00042	< 0.00041	< 0.00035	< 0.00035	< 0.00036	NA	< 0.00033	< 0.00031	< 0.00035	< 0.00035	< 0.00035	< 0.00037
< 0.00015	< 0.00021	< 0.0002	< 0.00017	< 0.00018	< 0.00018	NA	< 0.00017	< 0.00015	< 0.00018	< 0.00017	< 0.00018	< 0.00019
< 0.00027	< 0.00037	< 0.00036	< 0.0003	< 0.00031	< 0.00032	NA	< 0.00029	< 0.00027	< 0.00031	< 0.00031	< 0.00031	< 0.00033
< 0.00025	< 0.00034	< 0.00033	< 0.00028	< 0.00029	< 0.0003	NA	< 0.00027	< 0.00025	< 0.00029	< 0.00028	< 0.00029	< 0.00031
< 0.00032	< 0.00043	< 0.00042	< 0.00036	< 0.00036	< 0.00038	NA	< 0.00035	< 0.00032	< 0.00037	< 0.00036	< 0.00036	< 0.00039
< 0.00038	< 0.00051	< 0.0005	< 0.00043	< 0.00043	< 0.00045	NA	< 0.00041	< 0.00037	< 0.00044	< 0.00043	< 0.00043	< 0.00046
< 0.00049	< 0.00066	< 0.00065	< 0.00055	< 0.00056	< 0.00058	NA	< 0.00053	< 0.00048	< 0.00056	< 0.00055	< 0.00056	< 0.00059
< 0.00025	< 0.00034	< 0.00033	< 0.00028	< 0.00029	< 0.0003	NA	< 0.00027	< 0.00025	< 0.00029	< 0.00028	< 0.00029	< 0.00031
< 0.00012	< 0.00016	< 0.00016	< 0.00013	< 0.00014	< 0.00014	NA	< 0.00013	< 0.00012	< 0.00014	< 0.00013	< 0.00014	< 0.00014
< 0.0003	< 0.0004	< 0.00039	< 0.00033	< 0.00034	< 0.00035	NA	< 0.00032	< 0.00029	< 0.00034	< 0.00033	< 0.00034	< 0.00036
< 0.00013	< 0.00018	< 0.00017	< 0.00015	< 0.00015	< 0.00015	NA	< 0.00014	< 0.00013	< 0.00015	< 0.00015	< 0.00015	< 0.00016
< 0.00025	< 0.00034	< 0.00033	< 0.00028	< 0.00029	< 0.0003	NA	< 0.00027	< 0.00025	< 0.00029	< 0.00028	< 0.00029	< 0.00031
< 0.00012	< 0.00016	< 0.00015	< 0.00013	< 0.00013	< 0.00014	NA	< 0.00013	0.0015	< 0.00013	< 0.00013	0.00037 J	< 0.00014
< 0.00056	< 0.00076	< 0.00074	< 0.00063	<								

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

PE-12B(9.0-9.5)	PE-12SW(9.5-10.0)	PE-13B (9.0-9.5)	PE-13SW(6.5-7.0)	PE-13SW(6.5-7.0) DUP	PE-14SW(9.5-10.0)	PE-14SW-2 (033012)	PE-15SW(6.5-7.0)	PE-16SW(10.5-11.0)	PE-17SW(6.5-7.0)	PE-18SW(10.5-11.0)	PE-19SW(8.5-9.0)	PE-20SW(10.5-11.0)
1/16/2012	1/6/2012	1/18/2012	1/6/2012	1/6/2012	1/6/2012	3/30/2012	1/10/2012	1/10/2012	1/10/2012	1/12/2012	1/12/2012	1/12/2012
9 - 9	9.5 - 10	9 - 9.5	6.5 - 7	6.5 - 7	9.5 - 10	Final	Final	Final	Final	Final	Final	Final
Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final
< 0.0035	< 0.0041	< 0.0039	< 0.0037	< 0.0037	< 0.0039	NA	< 0.0038	< 0.0037	< 0.0039	< 0.0039	< 0.0039	< 0.004
< 0.035	< 0.041	< 0.039	< 0.037	< 0.037	< 0.039	NA	< 0.038	< 0.037	< 0.039	< 0.039	< 0.039	< 0.04
< 0.028	< 0.033	< 0.031	< 0.03	< 0.03	< 0.032	NA	< 0.03	< 0.03	< 0.032	< 0.032	< 0.032	< 0.032
< 0.048	< 0.056	< 0.053	< 0.051	< 0.052	< 0.054	NA	< 0.052	< 0.052	< 0.055	< 0.054	< 0.054	< 0.056
< 0.05	< 0.059	< 0.056	< 0.053	< 0.054	< 0.057	NA	< 0.054	< 0.054	< 0.057	< 0.057	< 0.057	< 0.058
< 0.037	< 0.043	< 0.041	< 0.039	< 0.039	< 0.041	NA	< 0.04	< 0.039	< 0.041	< 0.041	< 0.041	< 0.042
< 0.013	< 0.015	< 0.015	< 0.014	< 0.014	< 0.015	NA	< 0.014	< 0.014	< 0.015	< 0.015	< 0.015	< 0.015
< 0.011	< 0.013	< 0.013	< 0.012	< 0.012	< 0.013	NA	< 0.012	< 0.012	< 0.013	< 0.013	< 0.013	< 0.013
< 0.0093	< 0.011	< 0.01	< 0.0098	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.011	< 0.01	< 0.01	< 0.011
< 0.03	< 0.035	< 0.034	< 0.032	< 0.032	< 0.034	NA	< 0.033	< 0.033	< 0.034	< 0.034	< 0.034	< 0.035
< 0.017	< 0.02	< 0.019	< 0.018	< 0.018	< 0.019	NA	< 0.018	< 0.018	< 0.019	< 0.019	< 0.019	< 0.019
< 0.034	< 0.04	< 0.038	< 0.036	< 0.037	< 0.038	NA	< 0.037	< 0.037	< 0.039	< 0.039	< 0.038	< 0.039
< 0.013	< 0.015	< 0.015	< 0.014	< 0.014	< 0.015	NA	< 0.014	< 0.014	< 0.015	< 0.015	< 0.015	< 0.015
< 0.032	< 0.037	< 0.035	< 0.034	< 0.034	< 0.036	NA	< 0.034	< 0.034	< 0.036	< 0.036	< 0.036	< 0.037
< 0.038	< 0.045	< 0.042	< 0.04	< 0.041	< 0.043	NA	< 0.041	< 0.041	< 0.043	< 0.043	< 0.043	< 0.044
< 0.0076	< 0.0089	< 0.0084	< 0.0081	< 0.0082	< 0.0086	NA	< 0.0082	< 0.0082	< 0.0086	< 0.0086	< 0.0086	< 0.0088
< 0.012	< 0.014	< 0.013	< 0.013	< 0.013	< 0.013	NA	< 0.013	< 0.013	< 0.014	< 0.014	< 0.013	< 0.014
< 0.037	< 0.043	< 0.041	< 0.039	< 0.039	< 0.041	NA	< 0.04	< 0.039	< 0.041	< 0.041	< 0.041	< 0.042
< 0.011	< 0.013	< 0.012	< 0.012	< 0.012	< 0.012	NA	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.013
< 0.03	< 0.035	< 0.033	< 0.032	< 0.032	< 0.034	NA	< 0.032	< 0.032	< 0.034	< 0.034	< 0.034	< 0.035
< 0.0096	< 0.011	< 0.011	< 0.01	< 0.01	< 0.011	NA	< 0.01	< 0.01	< 0.011	< 0.011	< 0.011	< 0.011
< 0.009	< 0.011	< 0.01	< 0.0095	< 0.0097	< 0.01	NA	< 0.0098	< 0.0097	< 0.01	< 0.01	< 0.01	< 0.01
< 0.012	< 0.014	< 0.013	< 0.012	< 0.013	< 0.013	NA	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
< 0.051	< 0.059	< 0.056	< 0.054	< 0.054	< 0.057	NA	< 0.055	< 0.055	< 0.057	< 0.057	< 0.057	< 0.058
< 0.0087	< 0.01	< 0.0096	< 0.0092	< 0.0093	< 0.0098	NA	< 0.0094	< 0.0094	< 0.0098	< 0.0098	< 0.0098	< 0.01
< 0.0096	< 0.011	< 0.011	< 0.01	< 0.01	< 0.011	NA	< 0.01	< 0.01	< 0.011	< 0.011	< 0.011	< 0.011
< 0.0053	< 0.0062	< 0.0058	< 0.0056	< 0.0057	< 0.0059	NA	< 0.0057	< 0.0057	< 0.006	< 0.0059	< 0.0059	< 0.0061
< 0.01	< 0.012	< 0.012	< 0.011	< 0.011	< 0.012	NA	< 0.011	< 0.011	< 0.012	< 0.012	< 0.012	< 0.012
< 0.0059	< 0.0069	< 0.0065	< 0.0062	< 0.0063	< 0.0066	NA	< 0.0064	< 0.0064	< 0.0067	< 0.0067	< 0.0066	< 0.0068
< 0.0069	< 0.0081	< 0.0076	< 0.0073	< 0.0074	< 0.0078	NA	< 0.0075	< 0.0074	< 0.0078	< 0.0078	< 0.0077	< 0.0079
< 0.0098 J	< 0.011	< 0.011 J	< 0.01	< 0.01	< 0.011	NA	< 0.011 J	< 0.011 J	< 0.011 J	< 0.011 J	< 0.011 J	< 0.011 J
< 0.0091	< 0.011	< 0.01	< 0.0097	< 0.0098	< 0.01	NA	< 0.0099	< 0.0099	< 0.01	< 0.01	< 0.01	< 0.011
< 0.01	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	NA	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
< 0.011	< 0.013	< 0.012	< 0.012	< 0.013	< 0.013	NA	< 0.012	< 0.012	< 0.013	< 0.013	< 0.013	< 0.013
< 0.011 J	< 0.013	< 0.012 J	< 0.012	< 0.012	< 0.013	NA	< 0.012 J	< 0.012 J	< 0.013 J	< 0.013 J	< 0.013 J	< 0.013 J
< 0.017	< 0.02	< 0.019	< 0.018	< 0.019	< 0.02	NA	< 0.019	< 0.019	< 0.02	< 0.02	< 0.02	< 0.02
< 0.012	< 0.014	< 0.013	< 0.013	< 0.013	< 0.014	NA	< 0.013	< 0.013	< 0.014	< 0.014	< 0.014	< 0.014
< 0.009	< 0.011	< 0.01	< 0.009									

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

PE-12B(9.0-9.5)	PE-12SW(9.5-10.0)	PE-13B (9.0-9.5)	PE-13SW(6.5-7.0)	PE-13SW(6.5-7.0) DUP	PE-14SW(9.5-10.0)	PE-14SW-2 (033012)	PE-15SW(6.5-7.0)	PE-16SW(10.5-11.0)	PE-17SW(6.5-7.0)	PE-18SW(10.5-11.0)	PE-19SW(8.5-9.0)	PE-20SW(10.5-11.0)
1/16/2012	1/6/2012	1/18/2012	1/6/2012	1/6/2012	1/6/2012	3/30/2012	1/10/2012	1/10/2012	1/10/2012	1/12/2012	1/12/2012	1/12/2012
9 - 9	9.5 - 10	9 - 9.5	6.5 - 7	6.5 - 7	9.5 - 10	Final	Final	Final	Final	Final	Final	Final
Final	Final	Final	Final	Final	Final	NA	NA	NA	NA	NA	NA	NA
< 0.0098	< 0.011	< 0.011	< 0.01	< 0.01	< 0.011	NA	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
< 0.0083	< 0.0097	< 0.0092	< 0.0088	< 0.0089	< 0.0094	NA	< 0.009	< 0.009	< 0.0094	< 0.0094	< 0.0094	< 0.0096
< 0.031	< 0.036	< 0.034	< 0.032	< 0.033	< 0.034	NA	< 0.033	< 0.033	< 0.035	< 0.034	< 0.034	< 0.035
< 0.0083	< 0.0097	< 0.0092	< 0.0088	< 0.0089	< 0.0094	NA	< 0.009	< 0.009	< 0.0094	< 0.0094	< 0.0094	< 0.0096
< 0.01	< 0.012	< 0.012	< 0.011	< 0.011	< 0.012	NA	< 0.011	< 0.011	< 0.012	< 0.012	< 0.012	< 0.012
< 0.0081	< 0.0094	< 0.0089	< 0.0085	< 0.0087	< 0.0091	NA	< 0.0087	< 0.0087	< 0.0091	< 0.0091	< 0.0091	< 0.0093
< 0.0082	< 0.0096	< 0.0091	< 0.0087	< 0.0088	< 0.0092	NA	< 0.0089	< 0.0088	< 0.0092	< 0.0092	< 0.0092	< 0.0094
< 0.0087	< 0.01	< 0.0096	< 0.0092	< 0.0093	< 0.0097	NA	< 0.0094	< 0.0093	< 0.0098	< 0.0098	< 0.0097	< 0.01
< 0.0073	< 0.0086	< 0.0081	< 0.0077	< 0.0079	< 0.0082	NA	< 0.0079	< 0.0079	< 0.0083	< 0.0082	< 0.0082	< 0.0084
< 0.018	< 0.021	< 0.02	< 0.019	< 0.019	< 0.02	NA	< 0.019	< 0.019	< 0.02	< 0.02	< 0.02	< 0.021
< 0.051	< 0.06	< 0.057	< 0.054	< 0.055	< 0.058	NA	< 0.055	< 0.055	< 0.058	< 0.058	< 0.058	< 0.059
< 0.014	< 0.016	< 0.015	< 0.014	< 0.015	< 0.015	NA	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.016
< 0.031	< 0.037	< 0.035	< 0.033	< 0.034	< 0.035	NA	< 0.034	< 0.034	< 0.036	< 0.035	< 0.035	< 0.036
< 0.012	< 0.013	< 0.013	< 0.012	< 0.012	< 0.013	NA	< 0.012	< 0.012	< 0.013	< 0.013	< 0.013	< 0.013
0	0	0	0	0	0.54 J	NA	0	0	0.22 J	0.36 J	0.36 J	0
< 0.00031	< 0.00037	< 0.00035	< 0.00033	< 0.00034	< 0.00036	NA	< 0.00034	< 0.00033	< 0.00036	< 0.00036	< 0.00036	< 0.00037
< 0.00035	< 0.00043	< 0.0004	< 0.00039	< 0.00039	< 0.00041	NA	< 0.00039	< 0.00039	< 0.00041	< 0.00041	< 0.00041	< 0.00042
< 0.00044	< 0.00053	< 0.0005	< 0.00048	< 0.00049	< 0.00051	NA	< 0.00049	< 0.00048	< 0.00051	< 0.00051	< 0.00051	< 0.00052
< 0.0003	< 0.00036	< 0.00034	< 0.00033	< 0.00033	< 0.00035	NA	< 0.00033	< 0.00033	< 0.00035	< 0.00035	< 0.00035	< 0.00036
< 0.00045	< 0.00054	< 0.00051	< 0.00049	< 0.0005	< 0.00052	NA	< 0.0005	< 0.00049	< 0.00052	< 0.00052	< 0.00052	< 0.00054
< 0.00039	< 0.00047	< 0.00045	< 0.00043	< 0.00043	< 0.00045	NA	< 0.00043	< 0.00043	< 0.00046	< 0.00045	< 0.00045	< 0.00047
< 0.00042	< 0.00051	< 0.00048	< 0.00046	< 0.00047	< 0.00049	NA	< 0.00047	< 0.00046	< 0.00049	< 0.00049	< 0.00049	< 0.0005
< 0.00035	< 0.00042	< 0.0004	< 0.00038	< 0.00039	< 0.00041	NA	< 0.00039	< 0.00038	< 0.00041	< 0.00041	< 0.00041	< 0.00042
< 0.00047	< 0.00056	< 0.00053	< 0.00051	< 0.00051	< 0.00054	NA	< 0.00052	< 0.00051	< 0.00054	< 0.00054	< 0.00054	< 0.00055
< 0.00029	< 0.00035	< 0.00033	< 0.00032	< 0.00032	< 0.00034	NA	< 0.00032	< 0.00032	< 0.00034	< 0.00034	< 0.00034	< 0.00035
< 0.0004	< 0.00048	< 0.00045	< 0.00043	< 0.00044	< 0.00046	NA	< 0.00044	< 0.00043	< 0.00046	< 0.00046	< 0.00046	< 0.00047
< 0.00054	< 0.00065	< 0.00062	< 0.00059	< 0.0006	< 0.00063	NA	< 0.0006	< 0.00059	< 0.00063	< 0.00063	< 0.00063	< 0.00065
< 0.00031	< 0.00037	< 0.00035	< 0.00033	< 0.00034	< 0.00035	NA	< 0.00034	< 0.00033	< 0.00036	< 0.00036	< 0.00035	< 0.00037
< 0.00057	< 0.00068	< 0.00065	< 0.00062	< 0.00063	< 0.00066	NA	< 0.00063	< 0.00062	< 0.00066	< 0.00066	< 0.00066	< 0.00068
< 0.00039	< 0.00047	< 0.00044	< 0.00042	< 0.00043	< 0.00045	NA	< 0.00043 J	< 0.00043 J	< 0.00045 J	< 0.00045 J	< 0.00045 J	< 0.00047 J
< 0.00031	< 0.00037	< 0.00035	< 0.00033	< 0.00034	< 0.00035	NA	< 0.00034	< 0.00033	< 0.00036	< 0.00036	< 0.00035	< 0.00037
< 0.00037	< 0.00044	< 0.00042	< 0.0004	< 0.00041	< 0.00043	NA	< 0.00041	< 0.0004	< 0.00043	< 0.00043	< 0.00043	< 0.00044
< 0.0003	< 0.00036	< 0.00034	< 0.00032	< 0.00033	< 0.00034	NA	< 0.00033	< 0.00032	< 0.00034	< 0.00034	< 0.00034	< 0.00035
< 0.00027	< 0.00033	< 0.00031	< 0.0003	< 0.0003	< 0.00032	NA	< 0.0003	< 0.0003	< 0.00032	< 0.00032	< 0.00032	< 0.00033
< 0.00042	< 0.00051	< 0.00048	< 0.00046	< 0.00047	< 0.00049	NA	< 0.00047	< 0.00046	< 0.00049	< 0.00049 J	<	

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

PE-12B(9.0-9.5)	PE-12SW(9.5-10.0)	PE-13B (9.0-9.5)	PE-13SW(6.5-7.0)	PE-13SW(6.5-7.0) DUP	PE-14SW(9.5-10.0)	PE-14SW-2 (033012)	PE-15SW(6.5-7.0)	PE-16SW(10.5-11.0)	PE-17SW(6.5-7.0)	PE-18SW(10.5-11.0)	PE-19SW(8.5-9.0)	PE-20SW(10.5-11.0)
1/16/2012	1/6/2012	1/18/2012	1/6/2012	1/6/2012	1/6/2012	3/30/2012	1/10/2012	1/10/2012	1/10/2012	1/12/2012	1/12/2012	1/12/2012
9 - 9	9.5 - 10	9 - 9.5	6.5 - 7	6.5 - 7	9.5 - 10	Final	Final	Final	Final	Final	Final	Final
Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final
8360	11800	6410	7450	7230	6760	NA	8390	8670	13900	8280	7940	7010
< 2.2	< 0.18	< 2.3	< 0.16	< 0.16	< 0.17	NA	< 0.18	< 0.16	< 0.19	0.23 J	< 0.17	< 0.19
2.8	2.6	2.4	4.2	3.7	2.2 B	NA	1.5 B	3.6	1.8 B	3.2	2.8	2.9
26.3	51.4	22.3 B	24.2	23.4	36.5	NA	27.9	27.2	65.5	26.6	24.4	20.8 B
0.43	0.69	0.28 J	0.38	0.37	0.23 J	NA	0.43	0.44	0.63	0.35 J	0.37 J	0.3 J
< 0.037	< 0.042	< 0.58	< 0.54	< 0.037	< 0.58	NA	< 0.59	< 0.55	< 0.62	< 0.038	< 0.039	< 0.043
1220	1660	1130	1710	1470	3760	NA	1730	1250	2070	1620	1710	1630
11.1	15.8	12.7	15.5	14.6	31.1	NA	13.4	13.3	19.3	14.1	12.4	13.1
7.3	6.6	6.1	6.8	6.9	15.2	NA	4.2 B	6.5	5.1 B	6.8	6.3	6.5
19.1	21.7	16.8	17.8	17.5	87.9	NA	14.1	21.3	24.2	19.3	18.1	17.9
18000	16000	14600	19400	18900	33200	NA	11900	20000	13000	19400	19200	17700
5.3	11.5	6.2	6.5	5.1	1.6 B	NA	6.9	7.3	10.5	5.2	4.6	5.2
3520	3160	2160	2970	2940	3680	NA	2450	3310	3260	3360	3690	3110
496	140	599	289	299	486	NA	150	551	116	613	442	404
< 0.013	0.018 B	< 0.014	< 0.014	< 0.014	< 0.015	NA	< 0.014	< 0.014	0.052	< 0.015	< 0.015	< 0.015
17	15.4	14.7	14.5	15.9	22.3	NA	13.3	16.5	17.3	17.4	15.3	15.2
839 B	1290	789 B	855 B	765 B	1080 B	NA	957 B	746 B	1370	970 B	847 B	774 B
< 0.29	< 0.33	< 0.31	< 0.29	< 0.29	< 0.31	NA	0.37 J	0.92 B	0.62 B	0.36 J	< 0.3	< 0.34
0.24 J	< 0.085	< 0.079	< 0.074	< 0.075	0.27 B	NA	0.27 B	0.36 B	0.19 B	< 0.57	< 0.57	< 0.63
87.9 B	57.2 B	< 1200	86.9 B	73.6 B	158 B	NA	53.8 B	54.6 B	53.2 B	80.8 J	82.7 J	87.2 J
< 1.1	< 0.26	< 1.2	< 0.23	< 0.23	< 0.24	NA	< 0.25	< 0.23	< 0.26	< 0.24	< 0.24	< 0.27
19.1	27.6	21.4	26.8	24.2	122	23	22.7	20.8	22	21	21.3	20.2
41.8	52.3	30.6	38	37	27.6	NA	36.7	41.3	56.8	39.4	39.7	32.8
< 0.23	< 0.27	< 0.27	< 0.26	< 0.26	< 0.26	NA	< 0.26	< 0.26	< 0.29	< 0.28	< 0.27	< 0.3
95	81.5	86	90.1	88.8	84.7	87.2	88.1	88.4	84.1	84.6	84.8	82.2

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

PE-21SW(8.5-9.0) 1/13/2012 8.5 - 9 Final	PE-22SW(8.5-9.0) 1/13/2012 8.5 - 9 Final	PE-23SW(8.5-9.0) 1/16/2012 8.5 - 9 Final	PE-24SW(8.5-9.0) 1/16/2012 8.5 - 9 Final	PE-25SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	PE-26SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	PE-27SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	FB(010612) 1/6/2012 Final	FB(010912) 1/10/2012 Final	FB(011212) 1/12/2012 Final	FB(011312) 1/13/2012 Final	FB(011612) 1/16/2012 Final	FB(011812) 1/18/2012 Final	FB (033012) 3/30/2012 Final	TB(010612) 1/6/2012 Final	TRIP BLANK(010912) 1/10/2012 Final
< 0.00027	< 0.00021	< 0.00023	< 0.00031	< 0.00023	< 0.0002	< 0.00022	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24
< 0.0002	< 0.00016	< 0.00017	< 0.00023	< 0.00017	< 0.00015	< 0.00017	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	< 0.2	< 0.2
< 0.00048	< 0.00038	< 0.00042	< 0.00056	< 0.00041	< 0.00036	< 0.0004	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23
< 0.00024	< 0.00019	< 0.00021	< 0.00028	< 0.00021	< 0.00018	< 0.0002	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	NA	< 0.19	< 0.19	< 0.19
< 0.00068	< 0.00054	< 0.00059	< 0.00079	< 0.00058	< 0.00051	< 0.00057	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	NA	< 0.28	< 0.28	< 0.28
< 0.00038	< 0.0003	< 0.00033	< 0.00044	< 0.00032	< 0.00028	< 0.00032	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	NA	< 0.15	< 0.15	< 0.15
< 0.0017	< 0.0013	< 0.0015	< 0.0019	< 0.0014	< 0.0012	< 0.0014	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	NA	< 1.3	< 1.3	< 1.3
< 0.00027	< 0.00021	< 0.00023	< 0.00031	< 0.00022	< 0.0002	< 0.00022	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21
< 0.00031	< 0.00024	< 0.00027	< 0.00036	< 0.00026	< 0.00023	< 0.00026	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	< 0.18	< 0.18	< 0.18
< 0.0002	< 0.00016	< 0.00018	< 0.00023	< 0.00017	< 0.00015	< 0.00017	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	< 0.18	< 0.18	< 0.18
< 0.0003	< 0.00023	< 0.00026	< 0.00034	< 0.00025	< 0.00022	< 0.00025	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22
< 0.00021	< 0.00017	< 0.00019	< 0.00025	< 0.00018	< 0.00016	< 0.00018	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	NA	< 0.29	< 0.29	< 0.29
< 0.00019	< 0.00015	< 0.00016 J	< 0.00022 J	< 0.00016	< 0.00014	< 0.00016	< 0.26	< 0.26	< 0.26 J	< 0.26	< 0.26 J	< 0.26	NA	< 0.26	< 0.26
< 0.0048	< 0.0038	< 0.0042	< 0.0056	< 0.0041	< 0.0036	< 0.004	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	NA	< 2.9	< 2.9	< 2.9
< 0.0028	< 0.0022	< 0.0024	< 0.0032	< 0.0023	< 0.0021	< 0.0023	< 3	< 3	< 3	< 3	< 3	NA	< 3	< 3	< 3
< 0.0029	< 0.0023	< 0.0025	< 0.0034	< 0.0025	< 0.0022	< 0.0024	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	NA	< 1.2	< 1.2	< 1.2
< 0.0074	< 0.0058	< 0.0064	< 0.0085	< 0.0062	< 0.0055	< 0.0062	< 7.6	< 7.6	< 7.6	< 7.6	< 7.6	NA	< 7.6	< 7.6	< 7.6
0.0002 J	0.0011	< 0.00013	0.00018 J	< 0.00013	< 0.00011	< 0.00012	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22
< 0.00025	< 0.0002	< 0.00022	< 0.00029	< 0.00021	< 0.00019	< 0.00021	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	NA	< 0.23	< 0.23	< 0.23
< 0.00084	< 0.00067	< 0.00073	< 0.00097	< 0.00071	< 0.00062	< 0.0007	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	NA	< 0.24	< 0.24	< 0.24
< 0.00044	< 0.00035	< 0.00038	< 0.00051	< 0.00037	< 0.00033	< 0.00037	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	NA	< 0.31	< 0.31	< 0.31
< 0.00022	0.00036 J	< 0.00019	< 0.00025	< 0.00018	< 0.00016	< 0.00018	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	0.84 J	< 0.18	< 0.18
< 0.00039	< 0.00031	< 0.00033	< 0.00044	< 0.00033	< 0.00029	< 0.00032	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	NA	< 0.19	< 0.19	< 0.19
< 0.00036	< 0.00028	< 0.00031	< 0.00041	< 0.0003	< 0.00027	< 0.0003	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22
< 0.00045	< 0.00036	< 0.00039	< 0.00052	< 0.00038	< 0.00034	< 0.00038	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	NA	< 0.37	< 0.37	< 0.37
< 0.00054	< 0.00043	< 0.00047	< 0.00062	< 0.00045	< 0.0004	< 0.00045	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	NA	< 0.21	< 0.21	< 0.21
< 0.0007	< 0.00055	< 0.0006	< 0.0008	< 0.00059	< 0.00052	< 0.00058	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22
0.011 J	< 0.00028	< 0.00031	0.00044 J	< 0.0003	< 0.00027	< 0.0003	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22
< 0.00017	< 0.00013	< 0.00015	< 0.00019	< 0.00014	< 0.00013	< 0.00014	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	< 0.22	< 0.22	< 0.22
< 0.00042	0.00066 J	< 0.00037	< 0.00049	< 0.00036	< 0.00031	< 0.00035	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	NA	< 0.29	< 0.29	< 0.29
< 0.00019	< 0.00015	< 0.00016	< 0.00022	< 0.00016	< 0.00014	< 0.00016	< 0.2	<							

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

PE-21SW(8.5-9.0) 1/13/2012 8.5 - 9 Final	PE-22SW(8.5-9.0) 1/13/2012 8.5 - 9 Final	PE-23SW(8.5-9.0) 1/16/2012 8.5 - 9 Final	PE-24SW(8.5-9.0) 1/16/2012 8.5 - 9 Final	PE-25SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	PE-26SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	PE-27SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	FB(010612) 1/6/2012 Final	FB(010912) 1/10/2012 Final	FB(011212) 1/12/2012 Final	FB(011312) 1/13/2012 Final	FB(011612) 1/16/2012 Final	FB(011812) 1/18/2012 Final	FB (033012) 3/30/2012 Final	TB(010612) 1/6/2012 Final	TRIP BLANK(010912) 1/10/2012 Final
< 0.0038	< 0.0037	< 0.0038	< 0.005	< 0.0039	< 0.0037	< 0.0037	< 0.3	< 0.3	< 0.31	< 0.3	< 0.3	< 0.34	NA	NA	NA
< 0.038	< 0.037	< 0.038	< 0.05	< 0.039	< 0.037	< 0.037	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.7	NA	NA	NA
< 0.03	< 0.03	< 0.031	< 0.041	< 0.032	< 0.03	< 0.03	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.4	NA	NA	NA
< 0.052	< 0.051	< 0.052	< 0.07	< 0.055	< 0.051	< 0.052	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.3	NA	NA	NA
< 0.054	< 0.053	< 0.055	< 0.073	< 0.057	< 0.053	< 0.054	< 1.5	< 1.5	< 1.6	< 1.5	< 1.5	< 1.7	NA	NA	NA
< 0.039	< 0.039	< 0.04	< 0.053	< 0.041	< 0.039	< 0.039	< 17	< 17	< 17	< 17	< 17	< 18	NA	NA	NA
< 0.014	< 0.014	< 0.014	< 0.019	< 0.015	< 0.014	< 0.014	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.47	NA	NA	NA
< 0.012	< 0.012	< 0.012	< 0.016	< 0.013	< 0.012	< 0.012	< 0.46	< 0.46	< 0.47	< 0.46	< 0.46	< 0.51	NA	NA	NA
< 0.01	< 0.0098	< 0.01	< 0.013	< 0.011	< 0.0098	< 0.0099	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.33	NA	NA	NA
< 0.033	< 0.032	< 0.033	< 0.044	< 0.034	< 0.032	< 0.032	< 0.97	< 0.97	< 0.99	< 0.97	< 0.97	< 1.1	NA	NA	NA
< 0.018	< 0.018	< 0.018	< 0.024	< 0.019	< 0.018	< 0.018	< 0.38	< 0.38	< 0.39	< 0.38	< 0.38	< 0.43	NA	NA	NA
< 0.037	< 0.036	< 0.037	< 0.049	< 0.039	< 0.036	< 0.037	< 1	< 1	< 1.1	< 1	< 1	< 1.2	NA	NA	NA
< 0.014	< 0.014	< 0.014	< 0.019	< 0.015	< 0.014	< 0.014	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.2	NA	NA	NA
< 0.034	< 0.033	< 0.034	< 0.046	< 0.036	< 0.033	< 0.034	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.7	NA	NA	NA
< 0.041	< 0.04	< 0.041	< 0.055	< 0.043	< 0.04	< 0.041	< 0.93	< 0.93	< 0.94	< 0.93	< 0.93	< 1	NA	NA	NA
< 0.0082	< 0.008	< 0.0083	< 0.011	< 0.0086	< 0.008	< 0.0081	< 0.36	< 0.36	< 0.37	< 0.36	< 0.36	< 0.4	NA	NA	NA
< 0.013	< 0.013	< 0.013	< 0.017	< 0.014	< 0.013	< 0.013	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.4	NA	NA	NA
< 0.039	< 0.039	< 0.04	< 0.053	< 0.041	< 0.039	< 0.039	< 0.99	< 0.99	< 1	< 0.99	< 0.99	< 1.1	NA	NA	NA
< 0.012	< 0.011	< 0.012	< 0.016	< 0.012	< 0.011	< 0.012	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.4	NA	NA	NA
< 0.032	< 0.032	< 0.033	< 0.043	< 0.034	< 0.032	< 0.032	< 1.8	< 1.8	< 1.9	< 1.8	< 1.8	< 2	NA	NA	NA
< 0.01	< 0.01	< 0.01	< 0.014	< 0.011	< 0.01	< 0.01	< 0.53	< 0.53	< 0.54	< 0.53	< 0.53	< 0.59	NA	NA	NA
< 0.0097	< 0.0095	< 0.0098	< 0.013	< 0.01	< 0.0095	< 0.0096	< 0.31	< 0.31	< 0.32	< 0.31	< 0.31	< 0.35	NA	NA	NA
< 0.013	< 0.012	< 0.013	< 0.017	< 0.013	< 0.012	< 0.012	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.8	NA	NA	NA
< 0.055	< 0.053	< 0.055	< 0.073	< 0.057	< 0.053	< 0.054	< 5.2	< 5.2	< 5.3	< 5.2	< 5.2	< 5.8	NA	NA	NA
< 0.0094	< 0.0092	< 0.0094	< 0.013	< 0.0098	< 0.0092	< 0.0093	< 0.26	< 0.26	< 0.27	< 0.26	< 0.26	< 0.29	NA	NA	NA
< 0.01	< 0.01	0.0251 J	< 0.014	< 0.011	< 0.01	< 0.01	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.25	NA	NA	NA
< 0.0057	< 0.0056	< 0.0057	< 0.0076	< 0.006	< 0.0056	< 0.0056	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.32	NA	NA	NA
< 0.011	< 0.011	0.0352	< 0.015	< 0.012	< 0.011	< 0.011	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.32	NA	NA	NA
< 0.0064	< 0.0062	< 0.0064	< 0.0085	< 0.0067	< 0.0062	< 0.0063	< 0.49	< 0.49	< 0.5	< 0.49	< 0.49	< 0.54	NA	NA	NA
< 0.0074	< 0.0073	< 0.0075	< 0.0099	< 0.0078	< 0.0073	< 0.0074	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.6	NA	NA	NA
< 0.011 J	< 0.01 J	0.0232 J	< 0.014 J	< 0.011 J	< 0.01 J	< 0.01 J	< 0.23	< 0.23	< 0.23 J	< 0.23 J	< 0.23 J	< 0.25 J	NA	NA	NA
< 0.0099	< 0.0096	< 0.0099	< 0.013	< 0.01	< 0.0096	< 0.0098	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.25	NA	NA	NA
< 0.011	< 0.011	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.46	< 0.46	< 0.47	< 0.46	< 0.46	< 0.51	NA	NA	NA
< 0.012	< 0.012	< 0.012	< 0.016	< 0.013	< 0.012	< 0.012	< 0.32	< 0.32	< 0.33	< 0.32	< 0.32	< 0.36	NA	NA	NA
< 0.012 J	< 0.012 J	< 0.012 J	< 0.016 J	< 0.013 J	< 0.012 J	< 0.012 J	< 0.51								

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

PE-21SW(8.5-9.0) 1/13/2012 8.5 - 9 Final	PE-22SW(8.5-9.0) 1/13/2012 8.5 - 9 Final	PE-23SW(8.5-9.0) 1/16/2012 8.5 - 9 Final	PE-24SW(8.5-9.0) 1/16/2012 8.5 - 9 Final	PE-25SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	PE-26SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	PE-27SW (8.5-9.0) 1/18/2012 8.5 - 9 Final	FB(010612) 1/6/2012 Final	FB(010912) 1/10/2012 Final	FB(011212) 1/12/2012 Final	FB(011312) 1/13/2012 Final	FB(011612) 1/16/2012 Final	FB(011812) 1/18/2012 Final	FB (033012) 3/30/2012 Final	TB(010612) 1/6/2012 Final	TRIP BLANK(010912) 1/10/2012 Final	
< 0.011	< 0.01	< 0.011	< 0.014	< 0.011	< 0.01	< 0.01	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.38	NA	NA	NA
< 0.009	< 0.0088	< 0.009	< 0.012	< 0.0094	< 0.0088	< 0.0089	< 0.51	< 0.51	< 0.52	< 0.51	< 0.51	< 0.51	< 0.57	NA	NA	NA
< 0.033	< 0.032	< 0.033	< 0.044	< 0.035	< 0.032	< 0.033	< 7.1	< 7.1	< 7.3	< 7.1	< 7.1	< 7.1	< 7.9	NA	NA	NA
< 0.009	< 0.0088	< 0.009	< 0.012	< 0.0094	< 0.0088	< 0.0089	< 0.55	< 0.55	< 0.56	< 0.55	< 0.55	< 0.55	< 0.61	NA	NA	NA
< 0.011	< 0.011	< 0.011	< 0.015	< 0.012	< 0.011	< 0.011	< 0.37	< 0.37	< 0.38	< 0.37	< 0.37	< 0.37	< 0.42	NA	NA	NA
< 0.0087	< 0.0085	< 0.0087	< 0.012	< 0.0091	< 0.0085	< 0.0086	< 0.27	< 0.27	< 0.28	< 0.27	< 0.27	< 0.27	< 0.3	NA	NA	NA
< 0.0088	< 0.0086	< 0.0089	< 0.012	< 0.0093	< 0.0086	< 0.0087	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.29	NA	NA	NA
< 0.0094	< 0.0091	< 0.0094	< 0.012	< 0.0098	< 0.0091	< 0.0093	< 0.42	< 0.42	< 0.43	< 0.42	< 0.42	< 0.42	< 0.47	NA	NA	NA
< 0.0079	< 0.0077	< 0.0079	< 0.011	< 0.0083	< 0.0077	< 0.0078	< 0.3	< 0.3	< 0.31	< 0.31	< 0.31	< 0.31	< 0.34	NA	NA	NA
< 0.019	< 0.019	< 0.019	< 0.026	< 0.02	< 0.019	< 0.019	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.34	NA	NA	NA
< 0.055	< 0.054	< 0.056	< 0.074	< 0.058	< 0.054	< 0.055	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.5	NA	NA	NA
< 0.015	< 0.014	0.172	< 0.02	< 0.015	< 0.014	< 0.015	< 0.29	< 0.29	< 0.3	< 0.29	< 0.29	< 0.29	< 0.32	NA	NA	NA
< 0.034	< 0.033	< 0.034	< 0.045	< 0.036	< 0.033	< 0.034	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.4	NA	NA	NA
< 0.012	< 0.012	0.0684	< 0.017	< 0.013	< 0.012	< 0.012	< 0.27	< 0.27	< 0.28	< 0.27	< 0.27	< 0.27	< 0.3	NA	NA	NA
0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
< 0.00034	< 0.00033	< 0.00034	< 0.00044	< 0.00036	< 0.00034	< 0.00034	< 0.0036	< 0.0036	< 0.0038	< 0.0038	< 0.0036	< 0.0036	< 0.0036	NA	NA	NA
< 0.00039	< 0.00039	< 0.00039	< 0.00051	< 0.00041	< 0.00039	< 0.00039	< 0.003	< 0.003	< 0.0031	< 0.0031	< 0.003	< 0.003	< 0.003	NA	NA	NA
< 0.00049	< 0.00048	< 0.00048	< 0.00063	< 0.00051	< 0.00049	< 0.00049	< 0.006	< 0.006	< 0.0062	< 0.0062	< 0.006	< 0.006	< 0.006	NA	NA	NA
< 0.00033	< 0.00033	< 0.00033	< 0.00043	< 0.00035	< 0.00033	< 0.00033	< 0.0095	< 0.0095	< 0.0098	< 0.0098	< 0.0098	< 0.0095	< 0.0095	NA	NA	NA
< 0.0005	< 0.00049	< 0.00049	< 0.00064	< 0.00052	< 0.0005	< 0.0005	< 0.004	< 0.004	< 0.0041	< 0.0041	< 0.0041	< 0.004	< 0.004	NA	NA	NA
< 0.00044	< 0.00043	< 0.00043	< 0.00056	< 0.00045	< 0.00043	< 0.00043	< 0.005	< 0.005	< 0.0051	< 0.0052	< 0.005	< 0.005	< 0.005	NA	NA	NA
< 0.00047	< 0.00046	< 0.00046	< 0.0006	< 0.00049	< 0.00046	< 0.00047	< 0.0038	< 0.0038	< 0.0039	< 0.0039	< 0.0038	< 0.0038	< 0.0038	NA	NA	NA
< 0.00039	< 0.00038	< 0.00039	< 0.0005	< 0.00041	< 0.00039	< 0.00039	< 0.0062	< 0.0062	< 0.0064	< 0.0064	< 0.0062	< 0.0062	< 0.0062	NA	NA	NA
< 0.00052	< 0.00051	< 0.00051	< 0.00067	< 0.00054	< 0.00051	< 0.00051	< 0.0033	< 0.0033	< 0.0034	< 0.0034	< 0.0033	< 0.0033	< 0.0033	NA	NA	NA
< 0.00032	< 0.00032	< 0.00042	< 0.00034	< 0.00032	< 0.00032	< 0.00032	< 0.003	< 0.003	< 0.0032	< 0.0032	< 0.0032	< 0.003	< 0.003	NA	NA	NA
< 0.00044	< 0.00043	< 0.00043	< 0.00057	< 0.00046	< 0.00044	< 0.00044	< 0.0028	< 0.0028	< 0.0029	< 0.0029	< 0.0028	< 0.0028	< 0.0028	NA	NA	NA
< 0.0006	< 0.00059	< 0.0006	< 0.00078	< 0.00063	< 0.0006	< 0.0006	< 0.0064	< 0.0064	< 0.0067	< 0.0067	< 0.0064	< 0.0064	< 0.0064	NA	NA	NA
< 0.00034	< 0.00033	< 0.00034	< 0.00044	< 0.00036	< 0.00034	< 0.00034	< 0.0064	< 0.0064	< 0.0066	< 0.0066	< 0.0064	< 0.0064	< 0.0064	NA	NA	NA
< 0.00063	< 0.00062	< 0.00063	< 0.00081	< 0.00066	< 0.00063	< 0.00063	< 0.0029	< 0.0029	< 0.003	< 0.003	< 0.003	< 0.0029	< 0.0029	NA	NA	NA
< 0.00043	< 0.00042	< 0.00043	< 0.00056	< 0.00045	< 0.00043	< 0.00043	< 0.0041	< 0.0041	< 0.0042 J	< 0.0042 J	< 0.0043	< 0.0041	< 0.0041	NA	NA	NA
< 0.00034	< 0.00033	< 0.00034	< 0.00044	< 0.00036	< 0.00034	< 0.00034	< 0.0									

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

TRIP BLANK(011212)	TRIP BLANK(011312)	TRIP BLANK(011612)	TRIP BLANK(011812)
1/12/2012	1/13/2012	1/16/2012	1/18/2012
Final	Final	Final	Final
< 0.24	< 0.24	< 0.24	< 0.24
< 0.2	< 0.2	< 0.2	< 0.2
< 0.23	< 0.23	< 0.23	< 0.23
< 0.19	< 0.19	< 0.19	< 0.19
< 0.28	< 0.28	< 0.28	< 0.28
< 0.15	< 0.15	< 0.15	< 0.15
< 1.3	< 1.3	< 1.3	< 1.3
< 0.21	< 0.21	< 0.21	< 0.21
< 0.18	< 0.18	< 0.18	< 0.18
< 0.18	< 0.18	< 0.18	< 0.18
< 0.22	< 0.22	< 0.22	< 0.22
< 0.29	< 0.29	< 0.29	< 0.29
< 0.26 J	< 0.26	< 0.26 J	< 0.26
< 2.9	< 2.9	< 2.9	< 2.9
< 3	< 3	< 3	< 3
< 1.2	< 1.2	< 1.2	< 1.2
< 7.6	< 7.6	< 7.6	< 7.6
< 0.22	< 0.22	< 0.22	< 0.22
< 0.23	< 0.23	< 0.23	< 0.23
< 0.24	< 0.24	< 0.24	< 0.24
< 0.31	< 0.31	< 0.31	< 0.31
0.29 J	< 0.18	< 0.18	< 0.18
< 0.19	< 0.19	< 0.19	< 0.19
< 0.22	< 0.22	< 0.22	< 0.22
< 0.37	< 0.37	< 0.37	< 0.37
< 0.21	< 0.21	< 0.21	< 0.21
< 0.22	< 0.22	< 0.22	< 0.22
< 0.22	< 0.22	< 0.22	< 0.22
< 0.22	< 0.22	< 0.22	< 0.22
< 0.29	< 0.29	< 0.29	< 0.29
< 0.2	< 0.2	< 0.2	< 0.2
< 0.31	< 0.31	< 0.31	< 0.31
< 0.21	< 0.21	< 0.21	< 0.21
< 0.49	< 0.49	< 0.49	< 0.49
< 0.19	< 0.19	< 0.19	< 0.19
< 2.9	< 2.9	< 2.9	< 2.9
< 0.18	< 0.18	< 0.18	< 0.18
< 0.18	< 0.18	< 0.18	< 0.18
< 0.2	< 0.2	< 0.2	< 0.2
< 0.23	< 0.23	< 0.23	< 0.23
< 0.32	< 0.32	< 0.32	< 0.32
< 0.15	< 0.15	< 0.15	< 0.15
< 0.31	< 0.31	< 0.31	< 0.31
< 0.19	< 0.19	< 0.19	< 0.19
< 0.21	< 0.21	< 0.21	< 0.21
< 0.35	< 0.35	< 0.35	< 0.35
< 0.27	< 0.27	< 0.27	< 0.27
< 0.17	< 0.17	< 0.17	< 0.17
NA	NA	NA	NA

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Table 3: Summary of SR-13 Post Excavation Results for the January 2012 Excavation and March 30, 2012 Scrape, Ringwood Mines/Landfill Site, Ringwood, New Jersey.



LEGEND:

- 530 — EXISTING CONTOUR
- ~~~~~ ESTIMATED EXTENT OF HISTORIC FILL
- * 520.02 EXISTING SPOT ELEVATION
- LIMITS OF PETERS MINE PIT INVESTIGATION AREA
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- ~~~~~ TREE LINE
- ~~~~~ WETLAND BOUNDARY BY TRIDENT
- ██████ EXISTING DIRT TRAIL/ROAD
- ██████ STABILIZED ACCESS ROAD
- ██████ FORMER TEST TRENCH LOCATION
- SC-2 SOIL BORING
- ◆ OB-19 OVERTBURDEN MONITORING WELL
- SG-1 STAFF GAUGE
- RW-5 BEDROCK MONITORING WELL
- TP-6 INVESTIGATION TEST PIT
- △ SC-1 DIRECTIONAL MONITORING WELL
- 601 BLOCK
- 12 LOT
- ████ DRILLING PAD

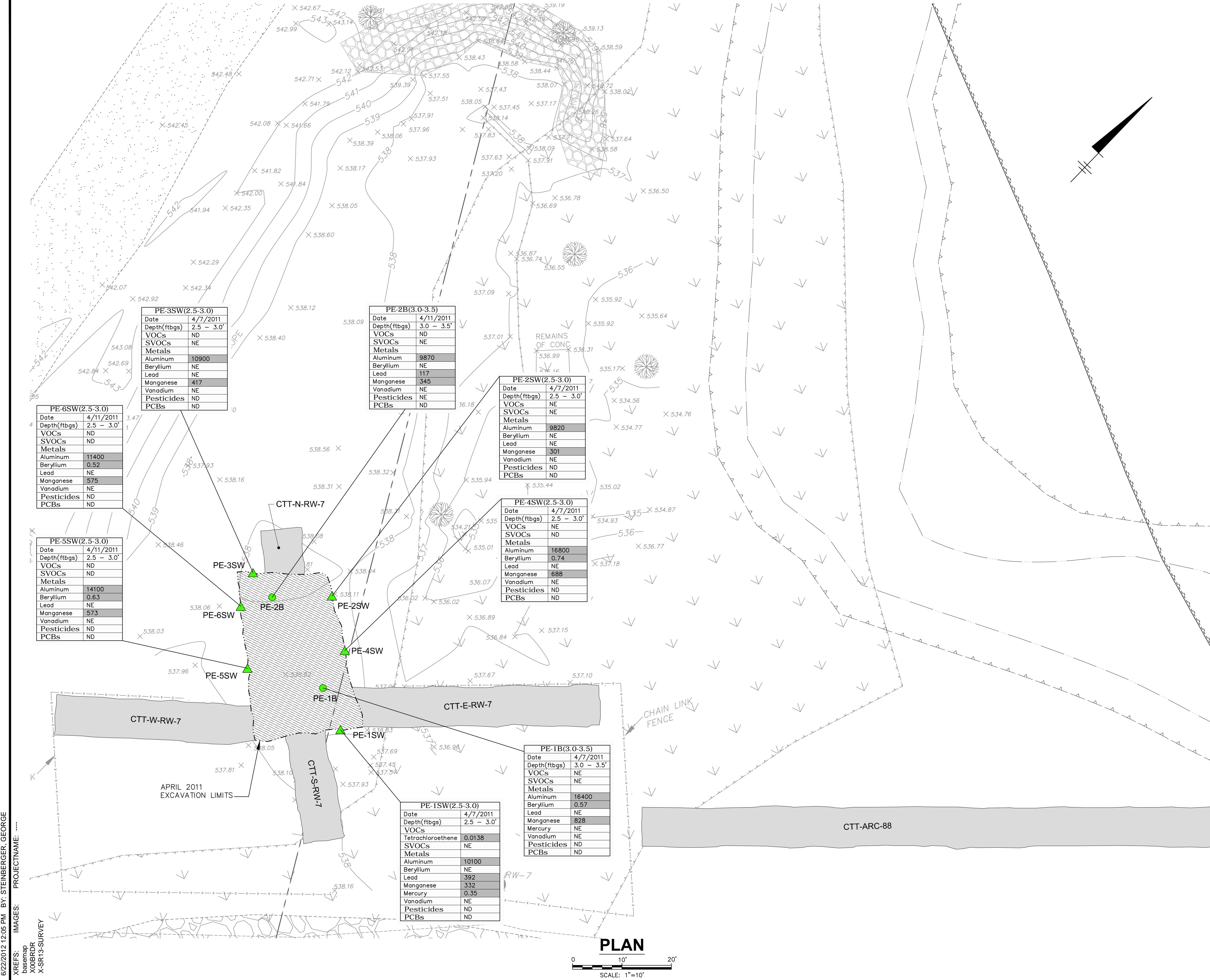
NOTES:

1. WETLAND BOUNDARY ESTABLISHED BY TRIDENT ENVIRONMENTAL CONSULTANTS (2005).
2. EXTENT OF HISTORIC FILL ESTIMATED FROM 1961 AND 1974 COMPARISON FIGURE.

0 30 60
SCALE IN FEET

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

LOCATION OF SR-13

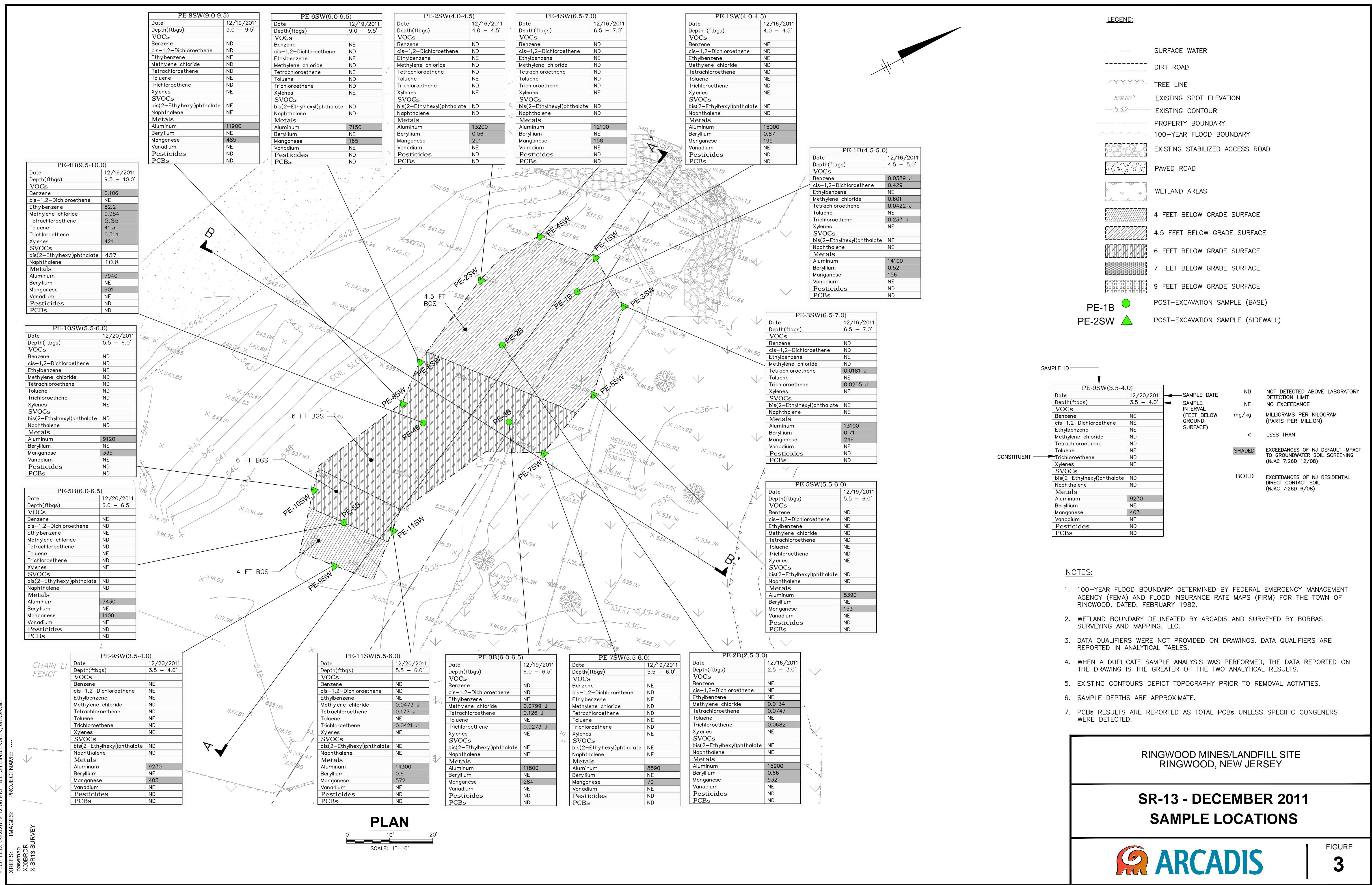


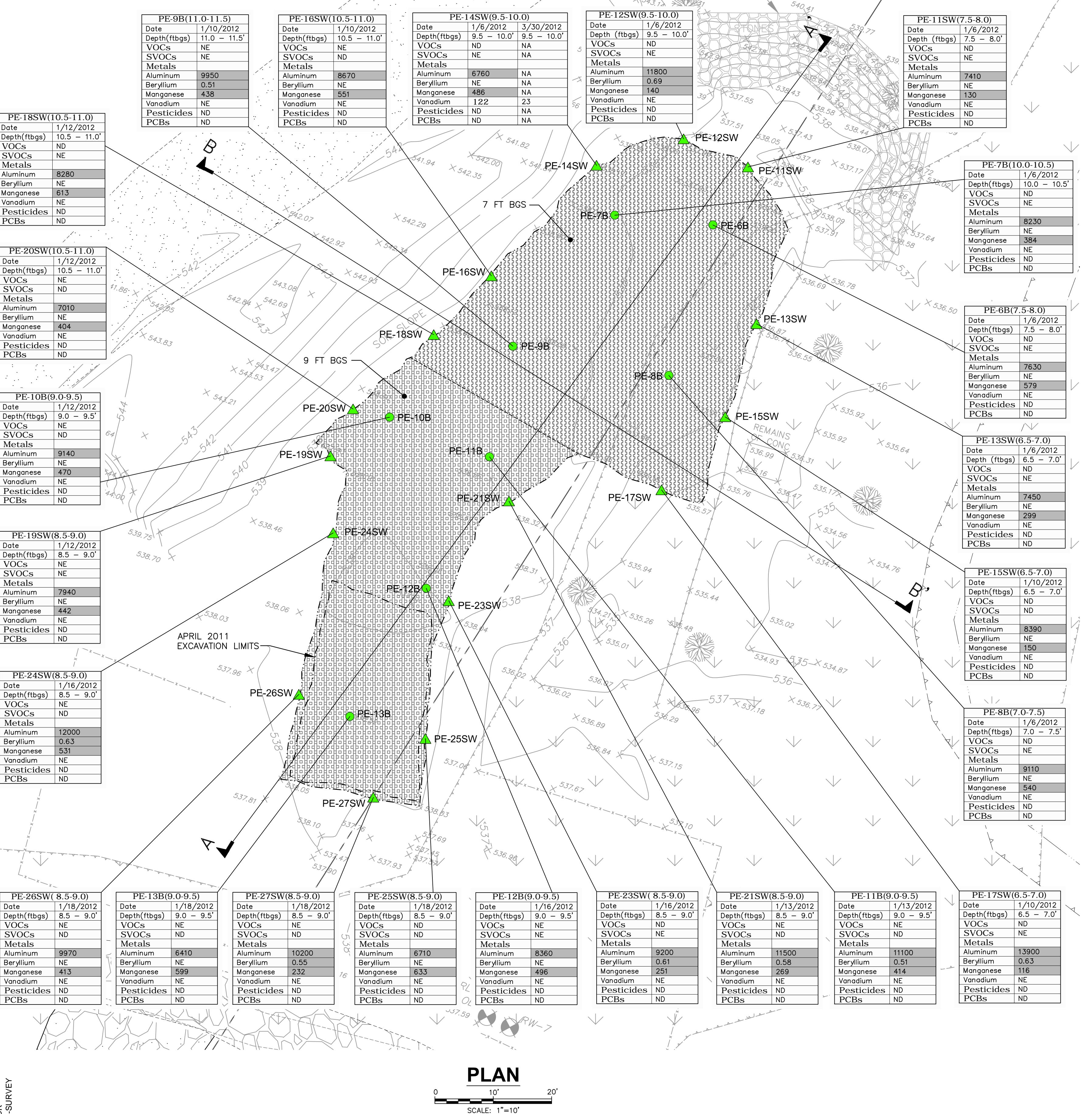
ND	NOT DETECTED ABOVE LABORATORY DETECTION LIMIT
NE	NO EXCEDANCE
mg/kg <	MILLIGRAMS PER KILOGRAM (PARTS PER MILLION) LESS THAN
SHADED	EXCEEDANCES OF NJ DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING (NJAC 7:26D 12/08)
BOLD	EXCEEDANCES OF NJ RESIDENTIAL DIRECT CONTACT SOIL (NJAC 7:26D 6/08)

NOTES:

1. 100-YEAR FLOOD BOUNDARY DETERMINED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AND FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF RINGWOOD, DATED: FEBRUARY 1982.
2. WETLAND BOUNDARY DELINEATED BY ARCADIS AND SURVEYED BY BORBAS SURVEYING AND MAPPING, LLC.
3. DATA QUALIFIERS WERE NOT PROVIDED ON DRAWINGS. DATA QUALIFIERS ARE REPORTED IN ANALYTICAL TABLES.
4. WHEN A DUPLICATE SAMPLE ANALYSIS WAS PERFORMED, THE DATA REPORTED ON THE DRAWING IS THE GREATER OF THE TWO ANALYTICAL RESULTS.
5. EXISTING CONTOURS DEPICT TOPOGRAPHY PRIOR TO REMOVAL ACTIVITIES.
6. SAMPLE DEPTHS ARE APPROXIMATE.
7. PCBs RESULTS ARE REPORTED AS TOTAL PCBs UNLESS SPECIFIC CONGENERS WERE DETECTED.

**RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY****SR-13 - APRIL 2011
SAMPLE LOCATIONS**





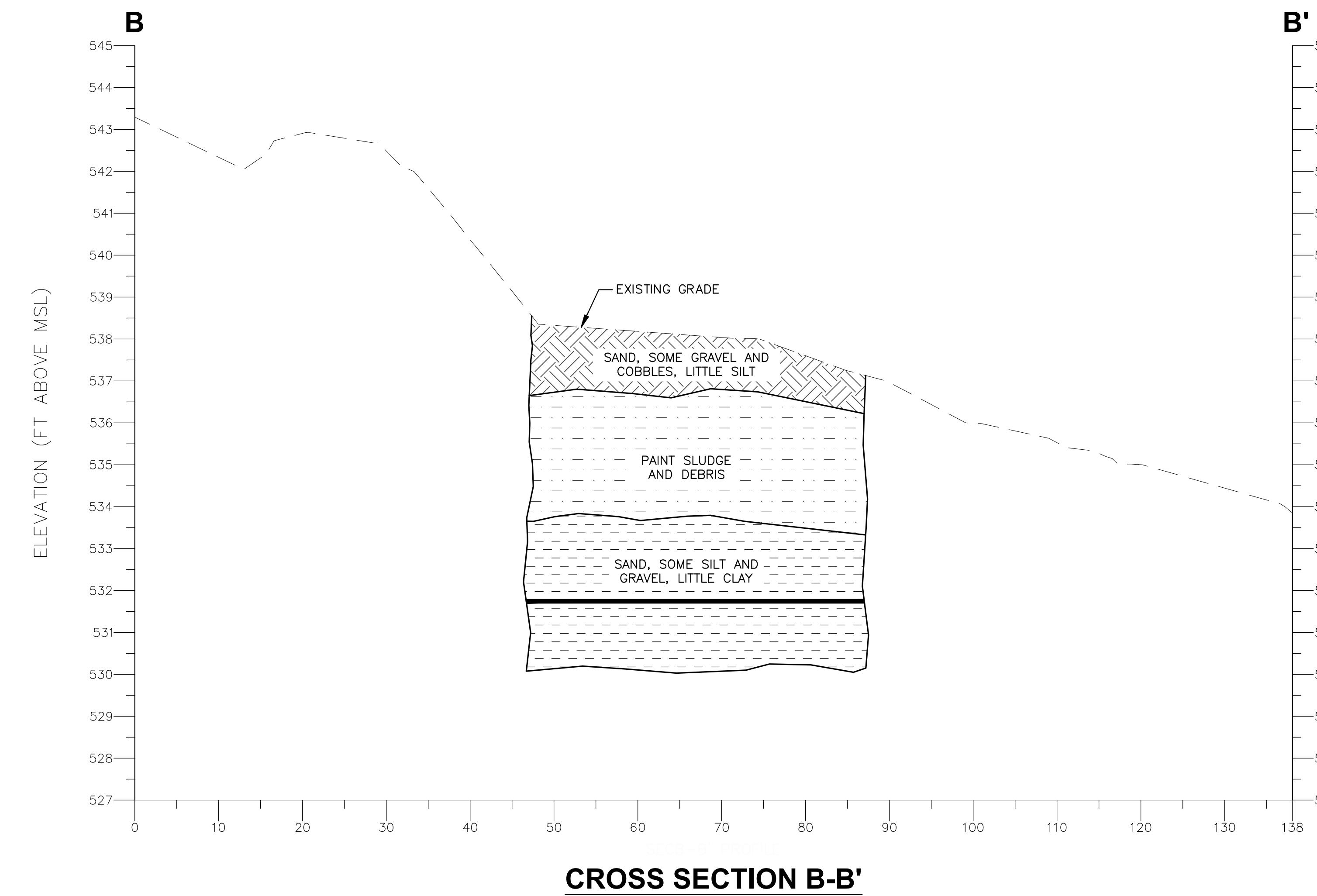
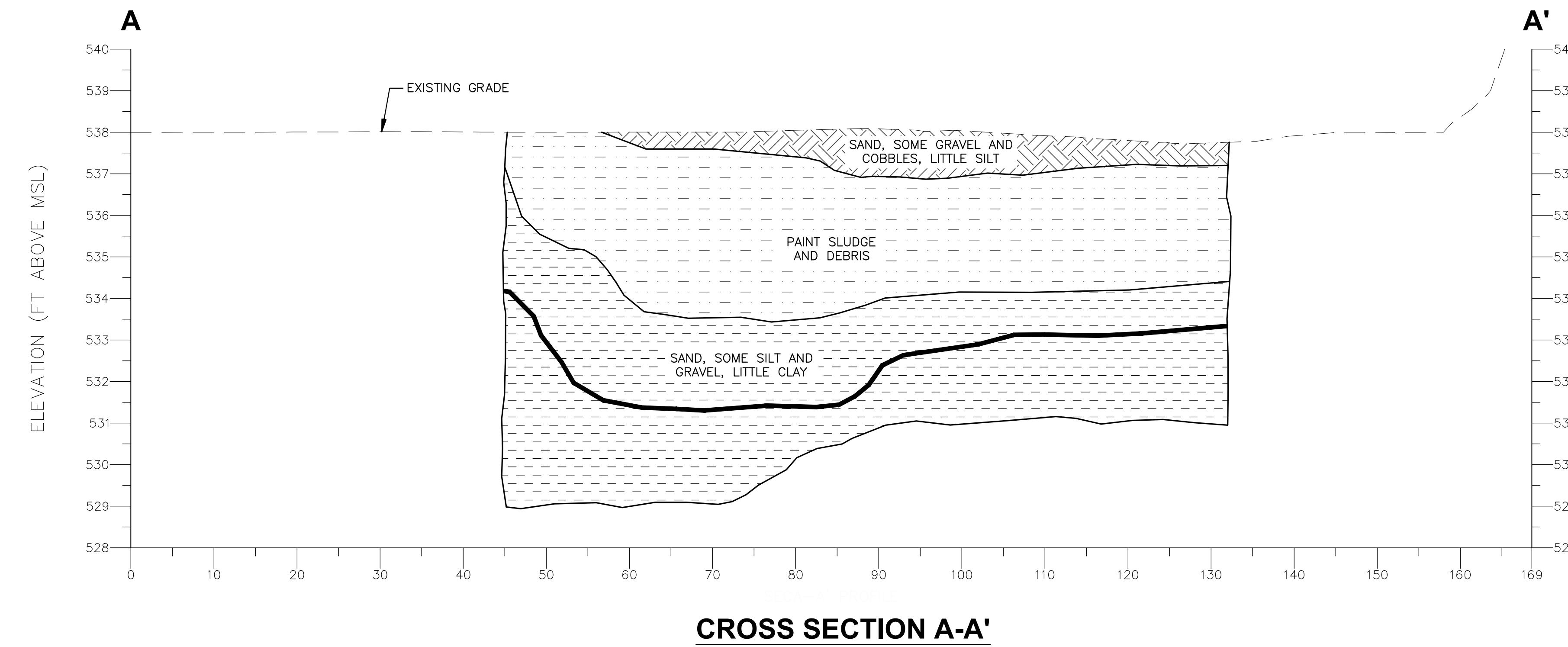
SAMPLE ID	PE-17SW(6.5-7.0)
SAMPLE DATE	1/10/2012
SAMPLE INTERVAL (FEET BELOW GROUND SURFACE)	6.5 - 7.0'
VOCs	ND
SVOCs	NE
Metals	Aluminum 13900 Beryllium 0.63 Manganese 116 Vanadium NE Pesticides ND PCBs ND

NA	NOT ANALYZED
ND	NOT DETECTED ABOVE LABORATORY DETECTION LIMIT
NE	NO EXCEDANCE
mg/kg	MILLIGRAMS PER KILOGRAM (PARTS PER MILLION)
<	LESS THAN

SHADED: EXCEEDANCES OF NJ DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING (NJAC 7:26D 12/08)

BOLD: EXCEEDANCES OF NJ RESIDENTIAL DIRECT CONTACT SOIL (NJAC 7:26D 6/08)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY



CROSS SECTION SCALES

0 10' 20'
HORIZONTAL SCALE: 1"=10'

0 2' 4'
VERTICAL SCALE: 1"=2'

RINGWOOD MINES/LANDFILL SITE
 RINGWOOD, NEW JERSEY

**SR-13 -
EXCAVATION CROSS SECTIONS**

